THE

MEDICAL AND SURGICAL REPORTER.

No. 1482.] PHILADELPHIA, JULY 25, 1885. [Vol. LIII.—No. 4.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

SURGICAL TREATMENT OF INFANTS.*

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Your committee having invited me to speak to you to-night upon the Surgical Treatment of Infants, I purpose to confine my remarks chiefly to personal experiences in the means of relieving the principal surgical difficulties which are met with during the first two years of life. If the subject shall occasionally lead me to mention older children, it will be because the line between infancy and childhood is not a marked and well defined one.

As you are all active practitioners also, it will be unnecessary for me to dwell on detail, and I shall only touch upon practical points in treatment. The surgery of childhood as compared with that of adult life, is, aside even from congenital defects, sufficiently marked and distinctive to entitle it to separate consideration.

First of all, must the children's surgeon acquaint himself with the anatomy of the child. This is rarely done, as the ordinary adult dissections during a college course give little idea of the size and position of the individual elements as seen in the infant. In consequence of ignorance upon this practical point, many grievous failures have occurred. After unusually large opportunities for the study of both normal and abnormal tissues in the diminutive frame, I am still frequently surprised to note the exceeding smallness of different organs and canals.

Another essential element in the surgeon is tact in the management of the little ones, especially when dealing with those between the ages of two and ten. In hospital cases, but little history is attainable, and much depends upon quick perception. Naturally fearful of pain, the patient's mind must be diverted and engaged, or great difficulties in diagnosis will often occur from the fright and struggling. The operator not in sympathy with children, can never secure their confidence. Much will often be gained by quiet observation. It is not a month since my opinion, which in the first few moments of the consultation had been favorable to tracheotomy, was changed by five minutes' close watching, and the result proved the correctness of the procedure. To the person, however, who will carefully study individuality as well as disease, no department of medicine offers so pleasant a return for his labors. My personal experience with children has perhaps made me more hopeful in regard to the power of such individuals to endure pain, shock and disease, than would be indicated by the expressions of other authors; but to me there is no domain of surgery so attractive and gratifying as the treatment of children below the age of puberty. Their natural condition is that of hopefulness, and as soon as the depressing influence of shock, pain or fear is removed, the normal resiliency of mind and body asserts itself with such rapidity that the results are often surprising.

Again, a child has only inherited taints of constitution to contend against; his viscera are ordinarily in a healthy condition: an adult has not

*Read by invitation before the Philadelphia Obstetrical Society, June 4, 1885.

only hereditary, but all the acquired vices occasioned by misuse or abuse of any organ or sets of organs, a circumstance which often turns the scale in the struggle between life and death. Take, for example, the single instance of the outraging of tissues by either the moderate or the excessive use of alcohol, and every surgeon will testify that even slight wounds may, in such an individual, quickly develop a fatal attack of mania-a-potu.

Tetanus is not more frequent in infants than in adults, notwithstanding the tendency of the former to nerve excitability.

In regard to anæsthetics, my experience is that great benefit is obtained by the use of ether when pain can thereby be prevented. In the first weeks of existence, I admit that a feeble vitality would contra-indicate its use, although I have successfully administered it to a three-days' old infant. After the first or second month, I see no reason why we should needlessly inflict pain upon an infant simply because we can control it by brute force. In the examination of fractures great suffering is often inflicted by careless and frequent manipulation, and unless the diagnosis is easy and positive, unconsciousness should be produced. No case of bone injury should ever be passed by undiagnosed, when ether will solve the question.

In the opening of abscesses, the "primary influence" of ether is so readily obtained that it should be brought into use whenever practicable, as keenness of pain can thereby be avoided.

Fear plays an important part, and may depress the child's system even more than pain, hence great caution should be observed that all knowledge of any operative procedure should be guarded against. When the day for action arrives, let the surgeon quietly and gently state to the little one, if it has arrived at years of reason, just what it is proposed to do, at the same time assuring him that no pain will be experienced; and if such words be followed by firm, speedy, and judicious management, much agitation and fear will be avoided.

All preparations should be made out of sight and hearing of the patient, and instruments need never be seen by him, except when a strong impression is intended to be made upon the mind of a masturbating boy, requiring circumcision, in which case ether may also be omitted.

One word in regard to the method of anæsthetization. It is but natural that a child should be distrustful of any attempt to deprive him of consciousness, a fear which is greatly increased by the injudicious and greatly to be condemned habit of many parents who systematically threaten their offspring with the expression, "the doctor will come and cut your head off." A few kind words will often quiet the agitation, and simple directions as to the method of breathing will save many minutes of struggling resistance. With very young children, the first smell of ether may be masked by permitting them to see cologne poured upon the towel, after which ether may be quietly added, and they will feel that it is a perfume that they are breathing. This device has frequently served me a good purpose. I always allow a good admixture of fresh air for the first moment, but when the child actually begins to cry, then quick action answers best. The towel should now be well saturated and held firmly over nose and mouth until two or three strong screams and inhalations will yield a full primary impression, which can be gradually followed up to complete anæsthesia with safety.

Should any symptoms of ether narcosis occur, it is so easy to depress the head of a child, or to perform artificial respiration by acting upon the ribs, that serious accidents are infrequent. Subsequent vomiting is very common, but is not persistent, and is easily quieted by a small hypodermic of morphia, a procedure which ordinarily brings quiet sleep to the patient. If the child is feeble, I always allow milk up to within two or three hours of the operation, and then administer wine or whisky in water immediately before giving the anæsthetic. Milk with lime water and whisky is usually retained within ten minutes after the first vomiting on rousing. In tedious excisions, not only should preliminary precautions be taken to secure against prostration by shock, but hot water bags should be ready for use, which with hypodermics of brandy, may succeed in tiding over a temporary depression, which would otherwise end in death. When the loss of blood has been great, especially in acute surgery, important assistance may be gained by transfusion, either of blood or of a warm saline solution.

Under the head of arrest of hemorrhage, I would strongly advocate the use of animal ligatures, since the pain often incident upon the removal of threads, greatly disturbs the needed quietude of wound and mind.

Thorough asepsis and antisepsis are especially valuable, since we not only secure the admirable results that are attainable by their use, but are also enabled to disturb the child with far less frequency. I am now treating a girl with a railroad crush of the leg, which would thoroughly have

justified amputation, yet which under corrosive sublimate dressings has not been touched but six times in as many weeks, even though extensive sloughing has occurred. Save upon one occasion, at the height of the process of tissue-death, the applications have been taken away perfectly sweet, and the child has the promise of a reasonably good limb. In my ante-*septic* days, I certainly was never able to carry a patient through such a process, and keep the temperature as has been done in this case, below 99½° all the time, and usually but slightly above 98°. With infrequent dressings, the irritation of the child is but slight, and if pain is also absent, contentment is the rule, under proper nursing.

I cannot too strongly emphasize the importance of this latter condition. A kind, quiet, gentle nurse is one of the most valuable assistants in the real progress of the case, especially during the first week following the operation. Such care cannot be delegated to untrained and careless people, hence it is absolutely necessary that children should be in separate hospitals or in separate wards, under the best of care-takers. Even in private practice, the mother is rarely the best nurse for a child past two or three years of age, and a skilled attendant answers best. In hospital practice, I have often been surprised to see how contented and patient the majority of children of even three years of age will become, if the mother maintains a judicious absence and the nurse is efficient and kind.

Another point which I wish most emphatically to emphasize to-night is the fact that congenital defects are most inexcusably and persistently neglected by even good practitioners, either under the mistaken opinion that nothing can be done, or that a later period will be early enough. The consequence is that many unfortunates become helpless and hopeless cripples by their physician's advice, since, passing out of his sight and mind, the neglect engendered by his direction, "wait," is fostered by parents, ever ready to postpone a dreaded day.

Turning to some of the special surgical diseases of infants, I would say that it is my intention to simply touch upon a few points of treatment without regard to definite arrangement or order, since to consider almost any one of the conditions in full would require an entire evening's discussion.

In a new-born child, the first most probable trouble, requiring surgical relief or treatment will be *imperforate anus* or *rectum*. Such a condition is not improbable when we remember that the intestine is formed as a closed tube. If the malformation be simply one of occlusion of the anus by a membrane, it would seem to be the easiest of procedures for any practitioner to make an opening; yet I have seen children permitted to die with the entire ischio-rectal fossa and perineum bulging with retained fæces, when a simple puncture through a membrane closing an otherwise normal anus would have given immediate relief. This timidity may perhaps be explained by the fact that occluded anus and imperforate anus are confounded with imperforate rectum, and the case is given up as hopeless. In imperforate anus, the operation is still a simple one, since a crucial incision together with stretching of the mucous membrane to the skin, and subsequent dilatation with the finger or probe, is all that is required.

When the anus is normal and patulous, but the rectum is occluded by a membrane, or is actually absent, then a much more serious condition presents itself, the difficulty increasing in proportion to the extent of the deficiency. Should no meconium be passed within the first twenty-four hours, a careful search should be instituted. The little finger or a catheter passed into the anus will detect the obstruction, or if the anus be absent, the vagina, if present, may be explored for the abnormal fistulæ. As soon as the presence of fæces can be discovered in the fossa, a careful dissection should be made, keeping well backward, so as to avoid the vagina or the urethra and bladder. A catheter should always mark the position of the urethra. There is but little danger even in deep incisions, if the region of the coccyx and sacrum be followed. The gut found should be drawn down as far as possible, and secured, a channel being maintained through the rectal region, if necessary, by the finger or by bougies, the latter of which should not, however, be retained constantly in position. There is much more danger from subsequent hemorrhage if the external incision be free, and no fear need be entertained about the ultimate retention of the fæces; if the child escapes peritonitis and other inflammations, good control of the bowel is always secured, in fact, the chief subsequent danger lies in the formation of stricture. When the length of the bowel will not permit it to reach to the site of the anus, the new opening may be made nearer to the sacrum. Should no trace of the rectum be found within two inches of the anus, it is unsafe to further explore a region where peritoneum would be liable to injury; either left inguinal or left lumbar colotomy should

be performed. The right groin is to be selected if there are evidences of absence of sigmoid flexure. The left inguinal position gives a better subsequent opportunity of passing the bougie downward into the rectum, and thus establishing a proper anus. If the colon is full, it will not be difficult to find. In cases of doubt, its distension by air or water through a hypodermic needle would determine its termination. Abnormal openings into the vagina, bladder, or urethra rarely require early operation, but in non-retention of fæces at a later age, Rissoli's plan of procedure is a good one.

Later in childhood, the surgeon is often compelled to treat another condition of the rectum, namely, prolapse. This, if excessive and non-yielding to replacement, astringent applications, hot water bathings and general constitutional measures, must be cured by the production of linear eschars by nitric acid.

The genito-urinary organs may also require attention immediately after birth. A simple occluded urethra is easily relieved by the careful introduction of a sound or catheter. *Epi-* and *hypo-spadias* and *extrophy* of the bladder should not be allowed to go on to adult life without relief. As soon as the child has passed its dentition period, a plastic operation should be attempted for relief, since the mental and moral effect of such a deformity has often a marked influence upon the lives of the unfortunates. *Adhesion* of the *vulva*, or nymphæ, should not be overlooked, since not only does the nervous system suffer, but the parts may be improperly developed. Separation can almost always be accomplished by the finger or by a probe. An absolutely *imperforate hymen* should never be allowed to exist if discovered, since if permitted to impede the menstrual flow, at a later period, serious and even fatal results may follow its division, if the uterus and fallopian tubes have become dilated by the imprisoned secretion. *Imperforate vagina* should receive at least careful diagnostic attention to detect the presence of a uterus, and if not absent, fuller development will be secured if the passage can be opened during the first few years of life. With a catheter in the urethra and a finger in the rectum, a careful operator can explore safely. I have met with several cases in which the *penis* was preternaturally *short* and illy-formed, the body of the organ during flaccidity being almost entirely concealed in the fatty tissues of the pubis. In such instances I have removed the prepuce during the first three months of life, and have cut away all restricting bands of skin and connective tissue, sometimes even drawing beneath the penis an extra flap of skin when the corpus spongiosum has been short and dwarfed. By such means the fullest amount of growth is encouraged.

Adherent and *contracted prepuce* or *phymosis* has been the subject of much discussion, in regard to its causal influence upon certain nervous manifestations. My views upon this subject have been already published,* and after two years of additional experience, during which time I have been brought daily in contact with this class of cases, I can reiterate what I then stated, namely, that while more or less adhesion is an almost constant and normal condition, yet that when urinary, choreic, paretic, or any other nervous symptoms develop, a careful investigation should never be omitted, since a direct relation will, in a certain number of cases, be clearly evidenced, and removal of the cause will speedily cure the manifestation. The fact that even circumcision does not relieve the symptoms is undoubtedly true in many instances, and I have never claimed that preputial adhesion and narrowing was anything more than one of several factors, which should be carefully scrutinized. I have only urged that its influence should not be overlooked, and when so simple an operation as stripping the prepuce from the glans by the thumbs, or possibly by the use of the probe, is all-sufficient, there can certainly be no argument against removing this one factor. My opinion in regard to the feasibility of drawing back the prepuce in young children, even when the opening seems scarcely pin-hole in diameter, has been greatly strengthened, and circumcision is only necessary when the simpler method described fails to secure a prepuce freely movable over a normal glans. Dilatation even is but rarely required, a few moments of continuous pressure soon revealing the mucous layer, adherent perhaps just above the meatus, which when loosened permits the head to pass through the opening, and the corona is freed with the thumbs. Should temporary para-phymosis occur, two probes or a hair-pin slipped beneath the constriction will easily permit replacement.

Congenital hydrocele rarely requires much surgical interference beyond an evaporating lotion of muriate of ammonia or alcohol, as a few weeks will often close the canal, if hernia does not coexist, a fact which can be determined by non-translucency and capability of reduction. Should the connection with the peritoneum fail to close, puncture with the application of a truss will

*Philadelphia Medical Times, June 30, 1883.

usually complete the cure. A hydrocele with closed canal is better treated by tapping and injection than by seton. The diagnosis between *encysted hydrocele* of the cord, *hernia*, and *undescended testicle*, is sometimes difficult; but if the surgeon remembers that the former is simply a cyst in some unobliterated portion of the peritoneal coat of the cord, that its rounded shape can be detected if it is pulled well down into the scrotum, that it is usually translucent, that the impulse is not as decided as in the case of hernia, that it returns to the abdomen only by being pressed upward, and not with a slip and gurgle, he will rarely be lead astray. A hernia may coexist with either of the above-mentioned conditions, but if non-adherent careful isolation will settle the diagnosis. Should the hernia become strangulated, or the non-descended testicle become inflamed and infiltrated, the most careful examination will be necessary. In retained testicle, its absence from the scrotum will be the first point in arriving at a decision, but even in such a condition, the organ might be within the abdomen and an encysted hydrocele present, or the testis might, as has recently fallen under my notice, slip into the tissues of the perineum, and be exceedingly difficult to discover. In the case just mentioned, it sometimes requires numerous manipulations to cause the missing organ to return to its place in the pouch. Should hernia and retained testicle both exist, a double purpose can be gained by drawing the latter down and pushing the former up, and then applying a truss. The successful retention of the organ within the scrotum is a matter of great difficulty, and removal is scarcely justifiable in young persons unless pain or inflammation ensues. Extirpation, if required in later youth, will probably not interfere with the procreative power of the individual, since one gland will supply all requisite material, and the affected one is practically useless from atrophy, even if it is not devoid of tubular structure. Traction is of little service, as manipulation tends to increase the sensitiveness of the organ. In prognosis it should be remembered that cryptorchism exists in nearly ten per cent. of males at birth, and that descent may occur within the next few weeks.

Simple *umbilical* and *inguinal hernia* should receive early attention, as, contrary to the rule in adults, a cure can often be effected during the first year of life by the persistent use of a truss. In young infants, I prefer the hard rubber variety as more cleanly. The instrument should be applied during the first few weeks of life, and continued for one or more years. The treatment of strangulated hernia does not differ from that of the adult, but in obstruction of the bowels, *intussusception* is so commonly the cause of the blockade, that unless violent peritonitis is present, laparotomy, with careful search for the invagination, offers the best hope of relief, and I am glad to say is rapidly growing in favor.

Meningocele, *Encephalocele* and *Spina Bifida*, are complaints that will early require the surgeon's attention, or at least his expression of opinion and his prognosis. If attached by means of a narrow pedicle, constriction with an elastic band is feasible, but unfortunately this pedicle is but seldom found. Injection of iodine following tapping is rarely successful, yet is worthy of trial in so hopeless a task. In a large hydro-rachis of the lumbar region, lately under my care, which resisted pressure, tapping, injection and constriction, I was strongly inclined to excise the thin sac, and attempt a plastic operation by drawing in toward the median line two flaps of skin from the lumbar region, leaving the vacancies to granulate. Soon after a consultation, in which I was dissuaded from my attempt, the tumor ruptured spontaneously, and death occurred in two days, although frequent tappings had never produced any nervous symptoms. I had then never seen a record of such a plan of procedure, but only last week I noticed in the Journal of the American Medical Association (vol. iv, No. 17, p. 466) that Mr. Robson had performed this operation with successful results in two out of four cases. Strict antisepsis was enforced.

Cephalhæmatomata are usually easily distinguished from encephalocele or meningocele, and also from the simpler tumor, caput succedaneum, the latter being exterior to the periosteum and more doughy. The bloood in a cephalhæmatoma is always confined between the pericranium and the bone substance, and increases until the second or third day. The hardened ridge around the border of the tumor may give the sensation of an opening in the bone, but the orifice in meningocele is rarely as large as the base of the swelling mentioned. The peculiar crackling feeling upon pressure at a later period, is due to the new bone deposits beneath the periosteum. Absorption so generally takes place in three or four weeks, that aspiration or incision is unwise, even though antisepsis be thoroughly practised, unless in exceptional cases when suppuration is certainly present. Lotions have a good influence, at least upon the brain of the mother.

(*To be continued.*)

HOW SOON AFTER EXPOSURE TO SEPSIS MAY THE ACCOUCHEUR RESUME PRACTICE.*

BY GEO. F. FRENCH, A. M., M. D.,
Of Minneapolis, Minn.

The term puerperal fever embraces a group of essentially diverse affections, some of which are non-contagious, but the septicæmic variety is one which alone engages us in this discussion. Its formidableness may be inferred from the statement of Barker, that since 1740 there have been more than 200 epidemics of this disease—a humiliating fact when we consider that it is a largely preventible disease, caused too often by criminal negligence on the part of physician or nurse. It is more than thirty years since Semmelweiss proclaimed to the profession that the source of puerperal fever "is decomposing organic matter."

The great Simon sententiously observes, "Contagia are perhaps the most important of all the incidental physical influences which concern mankind."

Hebra says: "The discovery of Semmelweiss as to the chief source of puerperal fever, ranks in importance with that of Jenner."

In October of 1884, I addressed letters of inquiry to some of the most distinguished medical men in America and Europe, as to how far time is an essential factor in the cleansing process. In reply, Heger, Henry Savage, and J. Knowsley Thornton emphasized the importance of time as an element in the process; while Battey, Emmett, Goodell, Marcy, and Thomas, in this country, and Schröder, Martin, Nussbaum, Esmarch, and Volkmann, in Europe, affirmed the possibility of safely resuming obstetric or any surgical work, immediately after a thorough cleansing. The letter of Volkmann is especially significant. Under date of December 5, 1884, he writes:

"A surgeon who disinfects himself *well* can immediately after making a post-mortem or dressing a septic wound, undertake a laparotomy, do a trepanning, or dress a penetrating wound of the joint. Every morning, from six to eight, during the summer, I am obliged to give the students operations on the cadaver, and from ten to three I am busy in the hospital operating and dressing wounds, and I have never yet infected a patient. In the winter I have no operations on the cadaver to make. Comparing my results in the clinic, I can assure you that the mortality in summer is not greater than in winter.

"RICHARD VOLKMANN."

My own experience warrants me in making abdominal section on the day following exposure to sepsis. To show my confidence in the possibility of immediate and complete disinfection, I made the following experiments:

June 21, 1884. After laying open a dissecting abscess of the thigh, in a pyæmic patient, and stripping the limb with both hands till they were offensively drenched with the pus, I three hours later attended Mrs. M. in confinement, having first scrupulously disinfected myself.

July 22. In dealing with a case of pyo-nephrosis, before penetrating the kidney, I came upon a foul peri-nephritic abscess. Passing through this, the kidney was sought, incised, explored, and its grumous contents scooped out with the finger. The hand was so long engaged in this work, a more complete purulent saturation could hardly be conceived. In the afternoon of the same day I confined the wife of a physician, after stating to him the full extent of my morning exposure. In both cases the convalescence was perfectly normal.

February 11. I purposely infected my index finger with the ichor of an erysipelatous case, and after a careful washing with corrosive sublimate, inserted it into a fresh wound from which I had just excised a tumor.

In the rush of crowded professional work, some plead lack of opportunity to carry out the tedious and painstaking details of the disinfecting process; but how valid would such an excuse appear in the case of a wife or sister, or in the eye of the law? The present weight of evidence goes to show that the materies morbi of contagion, whether living or dead, is a non-gaseous material particle, capable of being acted upon and demonstrably susceptible of destruction. Its material nature makes it amenable to material and human influences.

To ascertain what time alone will effect in the destruction of septic matter, we may consider the well known property of contagia, of self-multiplication, and almost indefinite propagation under favoring conditions—a fact too frequently illustrated by the repeated outbreak in certain non-disinfected houses of diseases like diphtheria and scarlet fever after long intervals. Hildenbrand's coat retained its contagiousness for a year and six months. Pasteur has kept spores alive for twenty years. The resting spores of the bacilli are, of all forms of life, the most difficult to destroy, requiring a solution of corrosive sublimate $\frac{1}{5000}$; ordinary spores being killed by a solution of $\frac{1}{20000}$.

Steam or boiling water kills all bacteria in ten or fifteen minutes. Particles of contagion most frequently find lodgment on the hands—particu-

* Read before the American Medical Association, April, 1885.

larly under the finger nails. It is always possible, after the ordinary use of nail-brush or knife, to remove particles of dirt in which the microscope reveals living germs of possible infection. On this account I cut the nails short, and swab under them with a blunt instrument covered with cloth wet with some disinfecting liquid. I formerly used for this purpose five per cent. carbolic acid, but this made the sensitive flesh crack and pull away from the nails. I now use instead corrosive sublimate solution $\frac{1}{2000}$. All instruments are kept scrupulously clean, and the nurse is regarded as one of the instruments.

Volkmann's custom of wearing a linen coat to guard against emanations from the clothing is adopted. Cleanliness is a trait of personal character, and it is as impossible for some men to be scrupulously clean as for them to be orderly or systematic. Such physicians are by nature disqualified for ovariotomy, or even obstetric work. The closing sentence of Esmarch's letter epitomizes the discussion: "Time does not destroy septic dirt."

Hospital Reports.

A CASE OF ADDISON'S DISEASE.

REPORTED BY J. S. HACKNEY, M. D.,

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Frederick Miller, German, æt. 41, an old soldier; occupation, peddler; family history, negative; personal history, while in the army he was wounded twice—once in the thigh and once in the abdomen. The history of the latter is rather uncertain, as there was no scar, and only the patient's friends say he was wounded, but could not define how or where.

Eight months previous to being admitted he began to feel ill, and seemed very weak, especially in the legs, his skin began to assume the dirty yellow color peculiar to the disease, and he looked, upon admission, not unlike an Italian who had been very much exposed to the sun. He continued at his work until three days before admission, June 11, 1885. At that time he took, as his wife expresses it, "a fit," which lasted about fifteen minutes; he being unconscious at the time. She also noticed at this time, while washing him, that in the region over his kidneys he had several brownish looking spots about the size of a silver dollar, to which she called my attention.

On May 11th he walked to the hospital, a distance of two miles. Upon admission he had no well-defined symptom pointing to any special organ being the seat of the trouble, except the discoloration of the skin. He complained of being very weak, and would throw up his food soon after taking it.

Upon examination I found as follows: Lungs and heart sounds normal; liver slightly enlarged, but not markedly so. The spots over his back as his wife had told me. The conjunctivæ were not discolored. Upon palpation and pressure over the kidneys and other organs, I could elicit no pain. He was but slightly emaciated. Pulse weak, but normal in frequency. There was no constitutional disease that could be made out. I ordered his urine saved, and found it negative in character, both as to quantity and quality.

I ordered him a tonic of tr. cinch. comp., before meals, and gr. v. pepsin after meals, with a diet consisting of beef tea, milk toast and a little whisky. In ten minutes after taking the medicine and his food he would throw it off. He thought it was the medicine that caused the vomiting, and to please him, I stopped it for two doses, but with no better results. I then changed the tr. cinch., for tr. iron, with 2 gtt. acid carbol., before eating, but with no better results. I then ordered a teaspoonful of milk with a few drops of whisky every half hour, all to no good, as he would throw it off.

I then ordered him an enema of warm milk; the syringe being hardly withdrawn, when to my astonishment it all came away. This was repeated three or four times with still no better results.

I had now exhausted my remedies, but as the patient was still strong enough to go to the water closet when necessary, I was hopeful.

On the evening of June 26th, I saw him at seven o'clock, when he was sleeping soundly, but somewhat heavily. Thinking it best not to disturb him, I left him without examination. Three hours later (10 o'clock), the nurse came to me and said, "I think that man will die before morning." I replied, "I think not," and went in to see him. I found him drowsy, but answered my questions intelligently. He was breathing rapidly, with a pulse weak but easily counted. I ordered some whisky, hoping he would retain it by giving a very few drops at a time. He said to me. "Let me get on the commode, quick, and then I will take it," and suiting the word to the action, he got up *without assistance* and got on the commode. He sat there about one minute, when he fainted, he was lifted on the bed at once, and in ten minutes he was dead.

Twelve hours after death a post-mortem was held by Dr. M. C. Cameron and myself, with the following results: An incision was made from mid-sternum to the pubis, exposing the whole of the abdominal and thoracic viscera. The viscera were examined as follows: Lungs normal; heart somewhat atrophied, with beginning atheroma of the mitral valves; liver slightly enlarged, but of a normal texture; spleen normal; small intestines normal; pancreas attached to the under and posterior surface of the stomach, otherwise normal; stomach, the mucous membrane indicated a slight but chronic inflammation; left kidney was somewhat enlarged and pale, otherwise normal; the supra-renal capsule was enlarged to the size of a hen's egg, and was very firm and hard in consistence, and was attached to the cardiac end of the stomach, so much so that it had to be dissected away with the knife. Upon cutting it open it grated upon the knife, showing calcareous changes taking place. It contained numerous cheesy deposits, imbedded deeply in a fibro-cellular, semi-transparent cortex. Right kidney the same, with

its supra-renal capsule much larger and firmer, and containing more cheesy and calcareous deposits, and firmly attached to the under surface of the liver, so that a section of the liver had to be cut away in order to secure the specimen. The mesenteric glands in the neighborhood were somewhat enlarged and tuberculous. Both specimens were saved and put in the museum of the hospital.

MEDICAL SOCIETIES.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Discussion on Cholera. (*See page* 1.)

Dr. Bush, of Wilmington, Del., illustrated a point made by Dr. Hunt in reference to the removal of the well from the sick, by the following fact, which occurred in the Wilmington Almshouse in 1849.

The disease made its appearance with much violence and virulence, so that three-fourths of the inmates were attacked, and new cases were daily occurring. The floors of the house, which were old and emitted a disagreeable odor, were scrubbed, and both the floors of the house and the walls were washed with lime and chloride of lime —without effect; the disease went on. The inmates who were well were then removed to some shanties which were hastily put up on a lot across the road, and no new case occurred after their removal.

Similar instances were recorded by the English surgeons in India, where the removal of a camp had the effect of arresting the progress of the disease.

Dr. Bush also said that there was one point connected with this subject of special importance to Philadelphia, as well as to Delaware, viz.: the protection by quarantine established at the Capes of the Delaware. Last year there was a cutter stationed there under the direction of the Marine Hospital Service, also a hospital was erected. Having been removed for the winter, they should be restored early this season, inasmuch as there is such ready communication between all parts of Delaware and Philadelphia, that the protection of the former involves the protection of the latter, and indeed of all the country above. It is not sufficient to arrest vessels from foreign infected ports at the Lazaretto.

Dr. Ludlow described his remembrances of a severe epidemic of cholera which prevailed in Albany when he was a boy 12 years of age. He was also in the epidemic in Philadelphia in 1849, and, in fact, he had had experience with every cholera epidemic which had prevailed in this city. During the last epidemic he had charge of the cholera hospital. This was built in front of the almshouse, and from what he then saw he fully made up his mind that the disease could be prevented. Cleanliness, mental quietude, and absence of fear, are essential for prevention.

In regard to food, he said that in the severe epidemic in Albany, his father's family was permitted to eat everything that they had been accustomed to, with the exception of cucumbers; the reason for this restriction being that if any of them had gotten cholera, the neighbors would have blamed it on the cucumbers, and would have said that they deserved to have the disease. In subsequent epidemics, he had followed the same plan.

Another important point is to keep the system in good condition, and to see that the bowels are not constipated nor exceedingly relaxed, Another great prerequisite to prevention is good water.

If patients would only observe the usual laws of health, and avoid improper food and liquor, and *especially* taking liquor in excess when the premonitory symptoms are upon them, I believe that cholera would lose its dread. Great dram-drinkers afford a large field for cholera subjects.

Dr. Bailhache stated that although the vessel at the Breakwater quarantine had been removed, the hospital had been open all winter. On June 1, there will be placed on duty at this point a quarantine boat for boarding purposes. In order to make the quarantine effective, it will be necessary to have the pilots directed to bring all vessels to anchor during the night, so that they can be examined in the morning, for it is almost impossible to run the station day and night. While it was desirable to take these precautions, he agreed with Dr. Formad in thinking that it was very improbable that cholera would visit this country this year.

Dr. E. O. Shakespeare did not agree with those who were disposed to make light of the danger to which this country may be exposed from the invasion of cholera. It is not necessary to have cholera prevail in the northern countries of Europe to have it come to this country. There are two, perhaps three, instances, in which the infection came rapidly from the Mediterranean. The epidemic of 1865 started at Mecca, only nine months before its arrival in this country, in New Orleans, and avoided England entirely. There are two occasions in which the disease entered New Orleans from the West Indies, where it was not known to prevail.

There is, at the present time, a cholera epidemic in Spain, although the attempt has been made to conceal that fact. He did not think that a false alarm was created by insisting on preventive measures at a time when preventive measures can only be efficient, that is, before the invasion of cholera.

The lecturer had recommended the removal of those still well from the house; he should go further and establish a surveillance upon those removed, for it is well established that those who escape from quarantine may later develop the disease, and serve as sources of infection. There is a difference of opinion in regard to the length of the incubation period of cholera. The reports of the last cholera conference at Berlin bear upon this point. Koch states that in ordinary spring-water, the comma bacillus has been found alive at the end of thirty days; in sewage-water, at the end of seven days; in the contents of privies they have been found dead at the end of twenty-four hours, and from soiled garments germs have been cultivated after four days. Rietch and Nicati, at Marseilles, last summer, found comma bacilli living in the harbor at the end of eighty-one days. In a favorable culture soil, as agar-agar, the bacilli have lived one hundred and forty-four days. If these micro-organisms be the cause of cholera,

this has an important bearing on the length of effectual quarantine.

Dr. H. Hartshorne said that in 1854, he, with other physicians, went to Columbia, Pa., to give voluntary aid during an epidemic of cholera which was prevailing at that place. This town is situated on the Susquehanna river. At that time the weather was very hot, and the river was extremely low. Dead cattle were daily thrown from the railroad trains into the river. Many people received their water supply from the river. His observation of these circumstances led him to suspect that decomposing animal matter was the true promotive cause of cholera. A study of the facts concerning the disease in India, where the Ganges is used as a burying place, and where from the inundations large areas are covered with decaying animal and vegetable matters, had confirmed this conclusion. The facts known to-day have been known for a long time, but they used to be explained from a different standpoint. The standpoint is now that of the germ theory.

He had been much interested in reading the most recently stated views of Pettenkoffer, who holds that cholera is not an endogenous, but an ectogenous disease, and that its great determining causation is connected with locality. Pettenkoffer does not deny, but accepts, the germ theory of its causation, although not the comma bacillus. He holds that cholera is not personally contagious, and this, of course, has an important bearing on the preventive measures to be adopted.

Dr. Hartshorne did not admit the view that there is no occasion at present to consider the question of prevention. The history of cholera shows that there is no certainty about its movements; where it was last summer is no guarantee as to where it will be next summer. When it occurs in western Europe, especially early in the summer, it is likely to come to this country.

In 1866 there was a cholera scare almost as great as now, and our Board of Health was driven to take preventive measures. Although cholera came, and there were 900 deaths from the disease, the total mortality for the year was 300 less than the year before. A mortality of 900 was very small in proportion to the population at that time. The disease is not to be prevented by quarantine, which, indeed, it is impossible to enforce. There are many facts which justify the opinion that the disease is not contagious. The illustration of Dr. Bush, where the almshouse inmates were simply removed across the road and no new cases developed, points in that direction. In the Baltimore almshouse, in 1854, there were seventeen deaths on one side of the house, and not one on the other side. On the former side there was under the windows a cesspool into which the refuse from the dead-house was thrown. Pettenkoffer has shown that in Lyons there has never been a great epidemic, although Lyons is between Marseilles and Paris. In the same way, while cholera was prevailing in Carlisle and in Dumfries, it did not prevail in the intermediate town of Annan.

During a cholera epidemic, there should be houses of refuge for the well. It is inhuman to attempt to remove the sick. If quiet is essential in the early treatment of any disease, it is in cholera. Cholera, Dr. Hartshorne thought, could be stamped out by proper sanitary measures, because it is an ectogenous or extra-somatic disease in its origination, not propagated by personal contagion.

Dr. S. S. Cohen stated that his attention had been called to a pamphlet by Surgeon Jessop of the Indian army, describing an outbreak of cholera in a military camp, situated on elevated ground to leeward of the cholera hospital. After a careful study of all the surroundings, the conclusion was reached by the author, that the morbific elements had been carried to his camp by air blowing from the cholera hospital. It was also stated that all of those affected were individuals who had acquired a personal susceptibility by dietetic errors, especially the habit of eating a certain indigestible compound peculiar to the country. The instance was brought forward simply in connection with the theories of causation and transmission, to which reference had been made.

Dr. Ulrich, of Chester, referred to Dr. Hunt's allusion to personal susceptibility, but nothing would produce personal susceptibility quicker than fear. He thought that in Philadelphia and in the large cities, the popular mind had been drawn so tense with apprehension that it was ready to snap. It was all very well for physicians to talk among themselves and give their experience, but he did not consider it wise to fill the press with cholera alarms. . . . While the influence of the mind is potent for evil, it is also powerful for good. He cited one instance where cholera had broken out on a negro plantation, the well individuals were removed with much ceremony and with the positive assurance that the physician could prevent the disease. They were taken to a woods, without tents, and with only one blanket apiece. No case of cholera developed among them. . . . The public mind should be kept in a condition of as little apprehension as possible.

Dr. Blackwood said that he considered the main thing to be prevention. The practice of his preceptor, in a case of cholera, was to have the stools disinfected at once by the use of chloride of zinc, and the clothing and bedding which was soiled burnt. He adopted the same measures in the epidemic of 1866, and where the instructions were carried out the disease rarely spread beyond the first case. Even if Europe were ravaged from one end to the other, he thought that would be no reason why we should have it in this country. If the discharges and clothing, when the disease breaks out in a vessel, were thrown overboard, he thought cholera could not be brought to this country. There should be careful examination of passengers before starting, and careful supervision during the voyage. In a city like this it would be almost impossible to remove the well from the sick, while to remove the sick would be barbarous.

Dr. Gauntt, of Burlington, N. J., said that he was unwilling to ammit that nothing more was known of the cause of cholera than in 1849, when the most eminent pathologists declared that the causes of epidemic cholera and pestilential diseases are among those whose origin and principle is not given to man to comprehend. "That all was mysterious and invisible, all produced by powers whose *effects* alone are revealed to us."

The conservatism of the physicians of Philadelphia, which he so much admired, would scarcely admit the teachings of that date—that the appearance and disappearance of cholera coincided with violent storms, and while cholera prevailed electricity was retained with difficulty; that the power of loadstone was reduced from 80 to 14 pounds, the electric telegraph remained inactive, and that magnetism was almost neutralized; the only sure principles that we then received were that cholera was caused by a disturbance of the equilibrium between terrestral magnetism and the electric state of living bodies.

Pasteur teaches, by his investigations, that death is the result of life in excess, and reveals facts showing that the diseases he has chosen to find a cause for have been the result of a living specific organism, whose destructive power is only controlled by the exhaustion of the soil upon which it depends for its development and reproduction.

If there be a microbe-anthrax for splenic fever, tuberculosis, swine-cholera, chicken-cholera, small-pox, and others, why not for epidemic cholera? If it be not the comma bacillus of Koch, it must be some other bacillus, whose life is governed by the same immutable law, and whose living principle is a microscopical exotic plant that is capable of reproducing itself in any locality that favors the growth of our indigenous bacilli, called mould, mildew, must, etc., and in such places as other epidemic plants find most congenial. Localities do not produce epidemics; what is called filth, by the aid of darkness, heat, and dampness, offers a congenial soil for this class of plants, and when not preoccupied by the natives, offers a rich soil for the exotic, be it small-pox, diphtheria, yellow fever, or cholera.

From such places the contagium is carried and spread upon all the articles of food and drink, most, of course, in the immediate vicinity, but everywhere, the grocer, the butcher, the baker, and the visitor, is a common carrier of a prevailing disease.

He favored the publication of discussions upon medical subjects in the secular press, and did not believe that the influence of fear could produce any disease.

He said that the cholera bacillus pervaded the air and caused illness by being taken into the stomach with food, and to insure safety after the disease was introduced to any community, the board of health should direct that no person shall eat anything that had not been recently cooked or subjected to a very high temperature, or drink anything that had not been recently boiled.

He was of the opinion that water-pollution endemics, called typhoid fever, of so frequent occurrence, could be speedily arrested by preventing the use of drinking-water until it had been thoroughly boiled, and that Schuylkill water should never be used for that purpose that had not been exposed to a temperature of 212° F., which would effectually destroy the bacilli of typhoid and malarial fevers that abound in that river.

Dr. Gross, of Camden, had expected to hear some reference made to the medical prophylaxis of cholera by the use of sulphuric acid or water acidulated with sulphuric acid, and used for drinking purposes, instead of ordinary water, the strength of which can be modified by the presence or absence of any diarrhœic phenomena. Dr. Roland Curtin, who had charge of the asylum inmates of the Philadelphia almshouse grounds in 1866, fully demonstrated the value of this prophylaxis, "in its use for drinking purposes," and demonstrated its utility by an entire absence of cholera—or, at least, fatal cholera—among his special charges; whereas in the other departments, upon the same ground, there were numerous fatal cases of cholera.

Dr. Shakespeare said, in regard to the influence of fear, if there was one thing settled about cholera, it was that it is a specific infectious disease. No matter what contributing causes may be present, there must be added to these the one specific cause of the disease before there will be cholera. Fear as a cause of disease has, from the time of Adam, been associated with every disease which has attacked man. Every one admits that the state of the digestive apparatus has much to do with the susceptibility to cholera. The disinfectant and destructive power of the healthy gastric juice is a protective against the effects of the specific cause of cholera. Fear may induce such a condition of the digestive tract as will favor the multiplication and activity of the specific cause of the disease, but to assert that it is a cause of cholera is nothing less than ridiculous.

It has been said that the discussion of this subject should be kept to ourselves, and not allowed to reach the people, and that we should attempt to secure the legislation which is necessary to bring about these preventive measures in a meek and quiet manner, and with bated breath. Every ond knows that the only way for raising sufficient money for equipping sanitary departments can be obtained, is by arousing public sentiment; and this can only be done by the spead of information among the people, through the far-reaching secular press.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

(*Concluded from page* 68.)

Osteo-myelitis of the Femur.

Presented by Dr. DeF. Willard.

E. H., aged forty, female, has had trouble with left femur for six years; sinuses forming from time to time and healing after many months' discharge. On admission to hospital, an opening two and a half inches in length and one-half inch in width was found upon the inside of the thigh at the lower third. The bone was thickened to twice its normal size nearly to the trochanters; many cicatrices exist at various points on the thigh. The knee-joint is not swollen or painful, but the foot can only be moved through 40° of the arc of a circle. The discharge from the opening is thin, yellow, and very offensive, but not excessive in amount. This sinus has been open for two years. The patient can walk, but is unable to work, and suffers considerable pain. Injections of solution of chloride of zinc corrected the fetor, and as the former sinuses had healed, it was decided not to amputate, although this operation was carefully considered. The opening was accordingly enlarged, and as no sequestrum was found, but the cancellous tissue was much

softened, it was gouged and a counter-opening was made by boring through the outer shell of the condyle, a drainage tube being afterwards inserted. The wound was thoroughly disinfected, and immediately closed with dry sublimate dressings. The cotton used had been prepared with a solution of the corrosive chloride, 1 pt. to 500 instead of 1 to 1000, as was Dr. Willard's ordinary custom. On the second day, the temperature rose to 101° F.; vomiting was quite constant, and accompanied by great tenesmus and the frequent passage of bloody mucus. Upon opening the wound, it was found that the dressings had vesicated the skin for some distance about the wound. Recognizing the symptoms as probably due to the chloride, iodoform dressings were substituted, with carbolized oil. On the fourth day, possibly by infection from a most virulent and fatal case of erysipelas, a chill occurred, followed by fever, with a temperature of 104⅘° F., and upon opening the dressings, an erysipelatous inflammation was found extending from the toes to the groin. The diarrhœa and vomiting had ceased. At 8 a. m. the next day, under quinine and kairin, the temperature was 98°, but in the afternoon, after a chill, it rose to 103° with a pulse of 160, and death took place on the sixth day after operation. On examination, the femur, from three inches below the trochanters to the condyles, was found enlarged to twice its natural size, the outer shell being firm, but the entire internal structure showing marked osteo-myelitic changes. The articular cartilage of the femur was intact, but a ledge of osteophytes prevented anything more than the limited motion of the knee above-mentioned. There was no sloughing of the wound, and the discharge was odorless. Had amputation at the hip-joint been performed, the result would, probably, have been more fortunate.

Dr. Davis inquired at what part of the limb did the erysipelas start.

Dr. Willard said that the parts being covered he could not say whether the wound was or was not first affected.

Dr. Nancrede referred to the not uncommon occurrence of the rash at a distance from the wound to the previous constitutional and glandular involvement, and said that he thought erysipelas was an eruptive fever, just like scarlatina, etc.

Dr. Parish remarked that he had recently seen a patient whose history bore out Dr. Nancrede's remarks, and where the disease appeared at a still more remote point. The patient was one of Dr. Sinkler's where Dr. Parish had withdrawn by the aspirator through the vaginal wall three pints of pus from a pelvic abscess. Erysipelas attacked the face, while at no time was the skin over the swelling or the mucous membrane affected. At the same time that the first abscess was opened, another, more deeply situated, had been recognized. To show the dependence of the erysipelas on the local condition, as soon as the second abscess was evacuated through the abdominal wall of another three pints of pus, the erysipelas disappeared like magic, clearly demonstrating to Dr. Parish the interdependence of the two conditions.

Encephaloid Disease of the Stomach.

J. K. Mitchell.

The facts of the case from which the specimen presented to the society was taken are as follows:

J. M., an Irish teamster, aged 63, was admitted to the Episcopal Hospital November 28, 1884. His family history was good, and his own, except that he had always been a drinking man, and had had lead-poisoning four years previously. For two months before admission, he had suffered constant pain in the epigastrium. For a week his abdomen had been swelling, and he had complained of a constant ache in the back. No cardiac murmur could be heard. The resonance of both lungs was generally impaired; breath-sounds were absent at both bases for a space about four inches deep. There were percussion flatness and marked ægopheny over the same extent of surface. A general atheroma of the vessels was present. His bowels were constipated, his urine very scanty, measuring about eighteen fluid ounces daily, sometimes less, alkaline in reaction, dark-colored, and mal-odorous. Not a trace of albumen could be found after repeated examinations by picric acid, Heller's test, or heat. After several trials, Dr. Lewis, in whose charge the patient was, found pale hyaline casts, containing pus-cells, and made the sketch of them which I have here.

Basham's mixture, digitalis, occasional diaphoresis produced by means of pilocarpin, elaterium to evacuate the bowels, and liquid diet, made up the treatment. The man would take no solid food, but drank large quantities of milk. The œdema lessened for a time, but re-commenced at the end of six weeks, and about the same time he began to complain that everything taken into the stomach produced a painful sense of fullness. Nevertheless, he continued to take from three to four quarts of milk daily. A portion of this was given to him pancreatized, and the feeling of distension was thus for a time relieved. At the end of January he had a severe and obstinate seizure of diarrhœa, and failed rapidly.

Autopsy Fourteen Hours After Death.—Frame emaciated, belly greatly distended, right leg œdematous. On opening the abdomen the omentum was found very hard, much thickened, and quite white, and covered with small pale yellow nodules closely packed together; the whole was tightly adherent to the neighboring structures, so that to move it moved both stomach and intestines. The liver was small and pale, but of natural consistence and appearance on section. The gall-bladder was firmly fastened by adhesions to the liver and to the intestines. Both kidneys were small, very little congested, the capsules easily stripped off, and except that in each were one or two small cysts filled with clear watery fluid, showed no signs of disease. The abdominal cavity contained about sixteen pints of clear yellow fluid. The heart was small, its cavities were filled with little red and white clots, and the valves were all perfectly competent. The lungs were much congested at the bases, and somewhat compressed by the abdominal distension, but had no other evidence of disease.

The stomach, which I here present to you, was small, very hard to the touch, and externally felt rough. On opening it, nearly the whole internal surface, but more especially the posterior wall, about its middle, was found covered with masses

of hard elevated nodules, grayish-red or black on their tops, with diffuse inflammation surrounding the base of each. Among these some were softer than others, and in some the most elevated portion was ulcerated. The walls of the organ were very hard and firm.

The appearance suggested to me a diffuse carcinoma, and on making some sections and examining them microscopically, I was still more inclined to this view. Dr. F. P. Henry, who also examined some sections, found no evidences of cancer, and Dr. J. H. C. Simes, after also examining specimens thought cancer possible but doubtful.

The pyloric orifice does not appear closed at all, but there is a slightly increased induration about it which may prove to be the scirrhus from which the formation on the posterior walls has spread. The growth had all the macroscopical appearance of encephaloid, and occupied the more usual seat of that disease. The thickening of the walls of the stomach may too be due to that hypertrophy of the muscular coats which not uncommonly occurs when an extended growth of carcinoma exists, and adhesions such as I have described also are frequently found in such a condition.

I should like to submit the specimen for the consideration of the committee on morbid growths, who will, I hope, determine its character.

May 14, 1885.

Drs. Henry and Simes having both examined sections microscopically, were unable to detect anything beyond atrophy of the glandular elements with hyperplasia of the connective tissue.

Dr. O'Hara asked if there had been any symptoms of stomach disease.

Dr. Mitchell replied that there had been almost complete absence of stomach spmptoms; the patient complained of a feeling of distension after taking food, but vomiting had never occurred except after the administration of jaborandi.

Dr. W. A. Edwards inquired whether the nodular omental masses had been examined microscopically, and also what was the condition of the other glands throughout the body, as a knowledge of the condition of these structures would throw some light on the case.

Dr. Osler said that in the absence of evidence of carcinoma he thought that the case must be referred to general cirrhosis of the stomach, of which he had seen two cases; one involving the stomach alone, the other both that organ with the cæcum and a small portion of the colon. In both cases the actual presence of carcinoma could be excluded. He thought Dr. Mitchell's case was possibly one of this rare disease characterized by atrophy of the glands and increase of the fibrous stroma. He thought, however, that the omental nodules should be examined, for it is well known that in some cases of carcinoma of the stomach, with much thickening around the pylorus, etc., we could only be certain of the diagnosis by examination of the secondary nodules. In his cases there had been no adhesions of the stomach to other viscera.

Dr. Mitchell said that he was unacquainted with cirrhosis of the stomach, but that if his specimen were regarded as one of that disease, it left unaccounted for the actual or impending ulceration of one-third of the posterior wall of the stomach.

Dr. De Schweinitz presented for Dr. Randall a specimen of mastoid disease and meningitis, the notes of which will be published elsewhere.

Dr. E. C. Shakespeare made an interesting report of the facts arrived at by Dr. French and himself during their investigations of the recent typhoid outbreak at Plymouth, Pa.

EDITORIAL DEPARTMENT.

PERISCOPE.

Two Cases of Sudden and Extreme Loss of Hearing Relieved by Pilocarpine.

Dr. Thomas Barr thus writes in the *Brit. Med. Jour.*, June 13, 1885:

Disease of the nervous apparatus of the ear is usually so hopeless, and so little affected by remedies, that cases, such as the following, in which favorable results are obtained by treatment, seem worthy of being brought before the profession.

Case 1. J. M., a ship-steward, aged twenty-two, presented himself for treatment at the Glasgow Ear Hospital, on August 25, 1884, suffering from almost total deafness. He was a man of pale and unhealthy aspect. Six months before, he contracted syphilis, followed by secondary symptoms; for which, however, he was successfully treated. He was also somewhat addicted to alcoholic indulgence. One of his sisters suffered from phthisis pulmonalis, but the other members of a pretty large family were quite healthy.

Inquiry elicited from him the following account of the origin and course of the disease. About six weeks previously, while crossing the Atlantic on the voyage out to Montreal, he was seized with great nausea, vomiting, and severe giddiness. Accustomed to sea-life, he knew that he was not liable in the least to sea-sickness. By the time the ship arrived at Montreal, the sickness had passed away, and the giddiness had become much less. On the afternoon of his arrival, however, while walking in one of the streets of Montreal, the weather being extremely hot, he was suddenly seized with giddiness so extreme that he staggered and fell to the ground, without losing consciousness. After a short time, he recovered sufficiently to make his way, with assistance, to the ship. He was put in bed, and the surgeon of the ship prescribed some form of pills.

Up till this time, his hearing was unaffected; and, indeed, at no time during his past life had there been, to his knowledge, any dullness or other disturbance of the hearing on either side. On the following morning, however, he awoke

from sleep finding that his left ear was apparently totally deaf. As he lay with the right side of his head on the pillow, he could not hear what was said by a man speaking close beside him. But now a loud noise, like the rush of water, was constantly present in the deaf ear, as well as through the head. Towards night, the hearing of the opposite or right ear seemed also to be passing away, and next morning found him absolutely deaf on both sides, so that the loud shouting of his mates close to his head was by him quite unperceived. The extreme giddiness continued, and the loud rushing noise filled his head.

During the whole of the voyage back to Liverpool, he lay in bed in a condition of great dizziness, nausea, and total deafness. When he attempted to walk, his movements were like those of a drunken man; he kept in a straight line for a few steps, then reeled from side to side. Up till his arrival in Liverpool, there had been little, if any, pain in his head; but, while in the steamer from Liverpool to Glasgow, he became affected with severe pain in the back of his head, and very especially in the region behind his ears.

In Glasgow he was placed under the care of Dr. Halket, who shaved the head and applied a cantharides plaster on the surface behind each ear. These were repeated two or three nights afterwards. There was also prescribed by Dr. Halket a mixture containing iodide of potassium chiefly, with good effect, "clearing the head and helping the stomach," as the patient expressed it.

One morning, shortly after his arrival in Glasgow, when he awoke from sleep he experienced a sensation of stiffness in one cheek; and on examination, with the aid of a mirror, he found his face drawn to the left side. The odd appearance which he presented, with shaven head and twisted face, constrained him, even in his sad condition, to smile; this facial movement rendered, of course, the twisted appearance still more striking. In attempting to drink tea or water, the liquid tended to trickle out of his mouth. This facial paralysis of the right side was of short duration, passing away in the course of the same evening.

About this stage of the illness a consulting physician saw the patient, and expressed an unfavorable prognosis. His state, nevertheless, began to improve. Under treatment by iodide of potassium the pain in the head diminished, and the giddiness became much less, although some tendency to stagger still continued. The deafness, however, remained unaltered, and as soon as it was practicable, about seven weeks after the beginning of the illness, Dr. Halket sent him to the Ear Hospital for treatment.

On admission, I found his hearing by both aerial and osseous conduction, almost quite abolished. Words spoken very loudly into his ears could not be understood by him. In the right ear, however, the voice was heard, although the individual words could not be distinguished. He was unable to hear the loud tick of a watch on either side, pressed firmly on the auricle or on the bones of the head. The sound of a vibrating tuning fork applied to the bones of the head was also unperceived. Objective examination of the outer and middle ears yielded negative results; on both sides the tympanic membranes presented quite a normal appearance, while the Eustachian tubes were permeable. He did not now complain of the subjective sounds. The vertigo was much less than at an earlier stage of the illness; but there was still a disposition to stagger in walking. The pain in the head was at times quite absent, but now and then it returned in severe paroxysms.

The digestive functions seemed to be much disturbed; the tongue was thickly coated with a yellowish-brown fur, the bowels were persistently constipated, while an extremely foul odor was exhaled by the breath.

He was admitted to the indoor department of the hospital, and at once treated by pilocarpine injections. One of Wyeth's tablets, containing a third of a grain of the drug, was dissolved in six minims of water, and injected underneath the skin of the shoulder every second day for six days, and then every third day for nine days. Copious perspiration followed every application of the remedy. The first produced very considerable sickness and vomiting; on every subsequent occasion there was some nausea excited, but it was much less than after the first. The patient always remained in bed for a few hours after the use of the remedy.

Improvement in the hearing almost immediately manifested itself. A day or so after the first injection the patient noticed some improvement in the right ear, and this improvement seemed to go on gradually almost day by day. In three weeks after admission, he could hear and understand, with the right ear, conversation in a voice only slightly elevated above ordinary speech. In other respects also his condition improved. He soon afterwards resumed his occupation of steward on board a steamer.

On April 18, 1885, about nine months after the seizure, his state was as follows: On the right side a watch whose normal hearing distance is forty inches, was heard eight inches. On the left it was not heard even on pressure. This does not, however, truly represent his power of hearing speech, which was so good that persons conversing with him did not detect any dullness of hearing. A vibrating tuning fork applied to the middle line of the head was heard better in the right ear.

There were no subjective sounds in the ear or head. The tendency to stagger, which had continued for a considerable time, while in the dark, had passed completely away. The complexion was much healthier looking, the tongue was clean, and the breath was free from the foul odor.

Case 2. R. McG., a laborer, aged 54, was admitted to the Ear Hospital on February 20, 1885. He stated that he had been suddenly affected a fortnight before admission with total deafness while in the act of stooping at his work. He had been out of work for some months, and this sudden loss of hearing occurred just on the morning of his return to work. His bodily health had suffered from the poverty due to the enforced idleness, while his mental condition was depressed, owing to the conduct of a reprobate son. No hereditary tendency to ear-disease, and no syphilitic origin, could be traced. The shock of deafness, he said, was signalized by a sensation as if a pistol had been discharged in the interior of his head, and immediately afterwards he ceased to hear the noises in the ship-building yard where

he was employed, or the voices of the workmen. This was followed by severe pain affecting the whole head, but especially the vertex, and by a sensation in his right ear, "just as if a clock were working inside." There was also slight giddiness.

On admission, it was found that a watch with a loud tick could not be heard on pressure in either ear. The voice could not be heard, although loudly spoken into the right ear; in the left it was heard, but only partially understood. Osseous conduction by the tuning-fork was faint, and the duration of the perception was short. Objective examination of the ear showed a small oval calcareous patch, evidently of long standing, on each tympanic membrane, behind the handle of the malleus. These were probably the results of old catarrhal affections in the middle ears, and had no connection with this attack. Inflation of the middle ears had no effect upon the deafness. A cantharides plaster was first applied behind each ear, without, however, yielding any good result.

Subcutaneous injections of a solution of pilocarpine were then employed. The solution contained at first only one-twelfth of a grain of the pilocarpine; but it was increased, after three or four injections, to one-third of a grain. In the weaker form, they were employed daily; but the stronger solutions were only used every third day. In all, eight injections were employed. The patient remained in bed for six hours after each injection, and free diaphoresis always followed. Slight sickness was excited by the strong solutions. Improvement in the hearing of speech was observed when two injections had been used, and after that there was gradual but steady improvement in the hearing, with disappearance of the subjective sounds.

On April 13, 1885, two months after the seizure, the condition was as follows: The tick of a watch heard, in normal hearing, forty inches from the ear, was heard eight inches on the right side and one inch on the left. Conversation in an ordinary tone of voice was understood without any difficulty. The osseous conduction of sound by the tuning-fork was heard rather better than the aerial—a circumstance which was probably due to the existence of the old catarrhal affection of the middle ear. The subjective sound had completely disappeared.

Observations.—There can be little doubt that, in the two cases here described, the seat of the mischief was in the nervous apparatus of hearing. It is, however, not possible to determine with certainty in what part of the auditory nerve the lesion existed—whether in its roots in the brain, in its stem, or in its complex terminal expansion in the labyrinth.

In the first case, which was clearly due to syphilis, the gravity of the symptoms seems to indicate that the mischief was intracranial. The premonitory symptoms of nausea and vomiting, the pronounced vertigo and staggering, the severe pain in the back of the head, and the temporary affection of the facial nerve, seem to point to the auditory centres in the cerebellum as the probable seat of syphilitic exudation. On the other hand, in the second case, the lesion was probably labyrinthine and apoplectiform in character (apoplectiform deafness of Knapp), and of the nature of rupture of a small vessel simultaneously in both labyrinths, excited by the stooping posture, and predisposed by a generally enfeebled state of the system. The absence of marked vertigo is a somewhat noteworthy peculiarity of this case, and suggests that the lesion was more probably in the cochlea than in the semicircular canals.

When we consider the generally hopeless character of lesions of the nervous structures of the ear, it can hardly be denied that the favorable terminations in both of these cases were due to the action of the pilocarpine. Politzer, who was the first to propose this remedy in ear-disease, believed it to be serviceable chiefly in cases of labyrinthine disease of recent and sudden occurrence, and especially in those of syphilitic origin. My experience, as shown in these two cases, seems to confirm this view of the value of pilocarpine. In several instances of labyrinthine mischief gradually coming on in the course of chronic middle-ear disease, where I have used this remedy, there seemed to be no effect produced. As to the explanation of the therapeutic action of pilocarpine, we can only assume that it has an especial power of stimulating the absorbents in contact with the effused products before these have become organized, and that this resorbent effect has also some connection with its remarkable powers of exciting the cutaneous secretion. It seems to have a more decided action upon the intracranial absorbents; and the vascular and lymphatic supply of the labyrinth is in reality the same as that of the interior of the cranium. If this view of its action be correct, it would be reasonable to employ this method of treatment more generally in cases of cerebral apoplexy.

Recovery of Good Sight, after Twenty Years' Blindness.

Dr. George E. Walker thus writes in the *Lancet*, June 6:

Accustomed as I have been, during some dozen years' practice of the operation, to the great benefits resulting from the severance of adhesions of the iris to the cornea, I confess that the case which I now relate has astonished me not a little.

L. N——, a girl aged nineteen years and three months, was admitted to the School for the Indigent Blind on April 22, 1884. Her right eye showed all the cornea, except a narrow rim round the margin, as one dense leucoma to which the iris was universally adherent. Of course, this was hopeless. The left, in the central lower part, showed a dense leucoma, which shaded off rather abruptly into a fainter one just above, the whole leucoma having a diameter about half that of the cornea. The iris was adherent to the central part of the leucoma, except at the inner side, where a little of the pupillary edge had escaped, so that a very small pin-hole was left; but as it was behind the leucoma and could only be seen sideways, it was not available for vision, and the girl said that she could see no better with the left than with the right eye, nor could she count fingers with either, but had only perception of light.

Thinking that I might give the left eye enough sight to enable her to move about without knocking against chairs and tables, I suggested to her and her father the propriety of treatment; but

when they found out an operation was required, I received a prompt negative. At last the father consented that the girl should please herself, but it was not until November that she asked me to operate on her. On the 22d I attacked the upper part of the adhesion in the way described in the *Lancet* of January 31, p. 197, gaining a considerable increase of pupil. She suffered somewhat from the chloroform, and consented very reluctantly to the second operation, by which, on December 10, the severance of the upper limb was completed. On January 6, I divided the lower limb at one sweep, although it was very broad, and on the 13th I cut the little bit remaining on the outer side. She was so averse to this last operation that I had to pretend an anger which I did not feel, and almost compel her to submit. One would have expected that the great benefit which accrued most markedly after each operation would have made her eager to submit, but the contrary was the case. Her first sensation after admission of light into her eye was one of profound horror. She says now that when she first became conscious of sight, and therefore to some degree of space, her feeling was like that of one who looks over a precipice and fears that he will be impelled to throw himself down, and she, at the time, bitterly repented her consent to be taken out of the darkness which all her life thus far had enshrouded her. By this time, however, the leucoma had cleared up, especially in the upper part, and we found that she had a good-sized pupil, elongated from side to side, the upper, lower, and outer edge ragged from the cuts, whilst the inner presented the normal curve. I had hitherto thought it most probable that the lens had been destroyed, but now I found it existent and transparent, and on testing the eye (January 28) discovered that the long tension of the imprisoned iris has produced a myopia, requiring a 15 D. glass for its correction. The wearing of this speedily caused a change in her state of mind, and she soon ceased to regret her loss of blindness. Under the affectionate tuition of a fellow patient she learned her letters in a day, and to read in a week. Of course this was all the easier from her ability to read with her fingers on Moon's types. Like as occurred in the little boy whose case is described in the *Lancet* of January 31, 1885, a filament of uveal exudation joins the lower edge of the pupil to the cornea, and I shall divide this if I have reason to believe that it keeps up, in any material degree, the over-nutrition of the leucoma. This, however, now deprived of the large blood-supply given to it by the almost universal adherence of the iris, has cleared up greatly, the upper part being almost transparent, and her vision is now (March 2) $\frac{3}{40}$, and she reads pretty easily Jaeger 10, and with some little difficulty Jaeger 8—that is, print about the size of "leading article" type.

The main element of the surprise which I have experienced over this case is the retention of visual acuity by the retina under the twenty years' deprivation of light. I see so many examples to the contrary in the persons who present themselves at the Blind School—as, for example, in cases of neglected cataract, as well as in the more familiar instance of squint, which produces the amblyopia (ex inopsia of the old writers) that I was not prepared to find that in this girl the retina had preserved its sensitiveness so well; for all the want of acuteness now present may safely be debited to the opalescence of the cornea, which still remains. As this, however, is plainly decreasing, I trust that the eye may further improve. Another interesting fact is that the muscular tissue of the iris shows itself to be quite lively, as it responds promptly both to myotics and mydriatics.

I think now that I have said enough to show that this class of case—a more numerous class, probably, than that of cataract—is susceptible, even in the more formidable instances, of beneficial treatment, and that on the whole we may expect results at least as satisfactory as in other grave diseases of the eye.

Two Cases of Raynaud's Disease.

Before the Clinical Society of London (May 22): Dr. Colcott Fox brought two adults affected with this disorder, and read notes on the cases. A woman, æt. 41, of extremely nervous temperament, dated the commencement of the disorder from ten years back, but though this was the period when her attention was attracted by her pain, it is probable that she suffered from slight attacks for some years previously. In the earlier stages all her fingers continually went "like white wax." This condition of recurrent local syncope gradually gave place to local asphyxia, and the feet became involved. The fingers gradually lapsed into a state of chronic asphyxia, which was intensified by frequent attacks of more severity, often leading to "blood blisters and ulceration." The nutrition of the phalanges has suffered greatly, so that her hands are crippled, the fingers are fusiform in shape, livid, shiny, and withered, the nails variously distorted, and the end phalanges much atrophied and almost immovable. The nose and ears are affected to some extent on exposure. Cold and nerve shocks are ready exciting influences. The second case was that of a man, æt. 51, and was of considerable interest, from the fact that, like one of Raynaud's cases, he suffered from diabetes. His hands were not deformed, but he had suffered for several years from "dead fingers." He sought Dr. Fox's advice for symmetrical gangrenous patches on the skin, which recurred, and later for an attack of asphyxgia of one great toe and lower third of the inner side of the leg, and then it was found that he had been attacked in a similar manner, though more severely, in the other toe, and on another occasion blood blisters had formed beneath the ends of his toes. Dr. Fox concluded his paper by giving a reference to some cases which have been recorded as scleroderma of the extremities. A woman with the latter disease was shown to illustrate the difference between it and Raynaud's symmetrical gangrene of the extremities.

Dr. O'Connor would like to ask Dr. Fox if there was any history of phthisis or bloody urine? Last year, before the Pathological Society, he had shown a case of symmetrical gangrene. It was not entirely uncomplicated, but associated with thoracic tumors. He had tried nitro-glycerine in an attack which corresponded with Dr. Fox's case,

and in which the symptoms were materially lessened.

Mr. Harrison Cripps thought the pathology of these cases was somewhat obscure. He was always forcibly reminded of frost-bite and senile gangrene. The former was a local starvation of a part, and the latter wholly due to constitutional causes. Raynaud's disease stood half-way between the two conditions. A tree may carry on its circulation except in the extreme branches, and he thought this was a fair simile. The parts should, he thought, be well wrapt up, so as to guard against the changes in the atmosphere.

Dr. Barlow would like to make a few remarks upon the therapeutic aspects of the matter. He recommended the continuous current. He had determined to try this in some cases. In a very severe case that could hardly walk, and had suffered for two years, he began by treating with the constant current, placing one pole down the spine and the other upon one of the extremities. This did not prove very effectual, so he applied both poles to the affected parts. He galvanized for about twenty minutes every two days. Marked benefit resulted. The patient was able to go about his work, and the result has been permanent. He instructed him to shampoo his feet with oil. In the acute paroxysmal attacks during the intervals the patients are perfectly well, but in cold weather there was always a liability to attacks. The attacks lasted on an average a couple of hours. There was intense pain, the patient could hardly be kept still, the feet were quite black, and there seemed impending gangrene. In one attack after ten minutes he applied the constant current for half an hour. Then the hand became quite right; the other hand remained black for a longer time. He had tried nitrite of amyl in capsules, since by this remedy the arterioles were relaxed, and it had exerted physiological effects. If it had been administered earlier it might have succeeded better. The constant current, if used at all, should be employed every day, with the addition of vigorous shampooing.

Mr. Bryant said that he would like Dr. Barlow's remarks to be embodied as a communication to the Society. This had been done before.

Dr. Fox, in reply, said there was no hemoglobinuria; the agonizing pain felt is the attack is going off. The gangrene unquestionably was not due to diabetes. He had tried the constant current with great benefit.

Abscess of the Brain.

Dr. W. F. Westmoreland thus writes in the *Atlanta Med. and Surg. Jour.*, July, 1885:

W. C., age 26 years, presented himself to the clinic, October 13, suffering with severe pain in the head, well-marked stupor, and disposition to coma. He gives the following history: Four years ago, in a fight, he was struck on the head with a hoe. The blow fractured his skull, and rendered him senseless at the time, and for two weeks he was unconscious. He says that after that time he began to grow better, and was soon able to attend to his duties, but that the wound made with the hoe never healed. He says there has been a constant discharge from the wound all the time, but there has been very little pain until recently. It is a well-known fact, gentlemen, that abscess of the brain sometimes comes on a considerable time after injury. Horner mentions an instance where there was an interval of nearly twelve months from the infliction of the violence until the abscesss appeared. Sir Everhard Home mentions a case where nineteen months elapsed. There are examples to be found in Gross' Surgery where three years elapsed from the time of injury until the abscess appeared. In this case it is a little over four years since the injury was inflicted, and he has been suffering for a few days only with well-marked symptoms of abscess of the brain. There is one thing that may possibly influence this trouble. The patient had syphilis, and was treated for it before the reception of the injury to the head, and that may possibly influence the trouble and prevent the healing. There may be a piece of necrosed bone that has kept the discharge up. We will cut down upon the bone, and then we can determine whether we have necrosis or not. We simply make the existing opening in the scalp larger, and we find an opening in the cranium that has existed from the time of injury. A probe is now introduced into the opening and carried towards the centre of the brain, following a fistulous track: now with the probe introduced to the depth of four inches, you will notice that the pus flows freely. The treatment will consist in keeping the wound in the scalp open, and keeping the abscess well drained, and in consequence of the old syphilitic trouble, we will direct for him thirty grains of iodide of potash, to be given after each meal. The potash should be given largely diluted with water.

October 17. The patient is suffering to-day very greatly as the result of a closure of the scalp wound and a want of free drainage. We reopen the wound and make it larger, and direct that the wound be kept dilated with an elm tent.

October 24. Patient doing very well; abscess discharging freely and the patient free from pain; treatment continued. From October 24 to November 28, the discharge kept up; the patient was kept on same treatment.

November 28. Discharge has almost ceased; the probe can be inserted only three inches, showing a filling up of the cavity at least one inch.

December 12. The patient has been improving constantly, and the cavity in the brain is gradually filling; it measures only two and a quarter inches to-day.

January 12. Patient says he is feeling very well. He is wonderfully improved; is gaining flesh daily. The cavity has filled so much that the probe will only pass in one and a half inches. There is still a slight discharge.

February 6. Patient says he has felt perfectly well until a day or two ago, when some slight pain began at the old sore. The wound has healed entirely. We make an opening through the scalp to relieve this pain, and find a slight amount of pus tinged with blood. The probe that once could be introduced four inches into the brain will not pass in at all. We have every reason to believe that the patient will soon be well.

February 20. To-day we find the wound entirely

healed, with no pain at all. Every symptom has subsided. There has not been the slightest trouble since his last appearance; we therefore dismiss the patient as cured.

Syphylitic Hepatitis.

Dr. Robert S. Young thus writes in the *North Carolina Med. Jour.*, June, 1885:

On June 15, 1884, I was called to see a ten-year-old white girl, suffering from abdominal enlargement and dyspepsia, with the following history: Both parents living and in good health. The patient has been remarkably free from the ordinary diseases of childhood, and seemed to enjoy better than the average health until about one year ago. She then began ailing, without being actually sick. Her appetite failed; she lost flesh; had some eructations; her bowels moved sluggishly, and a general lassitude came over her. She was treated for scrofula, dyspepsia, and worms; tried a change of climate and the numerous mineral springs; nor did she escape the trial of every "patent medicine" which was recommended and urged by her many friends; she was kept from school and placed upon all kinds of diet, all to no good. The abdomen began to swell, and continued from day to day to grow larger; her strength completely broke down at last, and she could no longer leave her bed. This was the history of the case up to the time of my first visit. When I saw the little girl I at once noticed her cachectic appearance; her wrinkled face; the dull, listless expression of her sunken eyes; the peculiar dirty-yellowish hue of her skin; her emaciated body, and the prematurely old expression of countenance so often met with in children suffering from hereditary marasmus. The organs of the chest were normal. The abdomen was greatly enlarged by serous effusion. The fullness of the superficial abdominal veins denoted a congestion of the portal circulation. The great amount of the effusion and the tympanites above, effectually prevented me from determining the size of the liver with any degree of accuracy. Her tongue was pale, flabby, and covered by a whitish coat, and was indented by her teeth, which presented the characteristic notching of the central incisors first described by J. Hutchinson, which is of great significance in the diagnosis of retarded hereditary syphilis.

Remembering that ascites is rare in children, and that, when it happens, it is generally caused by tubercular peritonitis, or by cancer of one of the abdominal viscera, I made, more by exclusion than anything else, and by reflecting upon the failure of all kind of treatment tried so far, the general diagnosis of retarded hereditary syphilis, and the special diagnosis of syphilitic hepatitis. If success of treatment can verify a diagnosis, then mine was correct. Paracentesis was performed, the effusion and tympanites seriously threatening a fatal interference with the action of the heart, and nearly a gallon of a slightly opaque, yellowish fluid, containing a large percentage of albumen, was slowly withdrawn.

Mercurial inunction into the abdominal walls, and gradually increasing doses of the iodide of potassium, formed the treatment, and I had the gratification of seeing the child in good health by August 10, a little less than three weeks after beginning these therapeutic measures.

Immediately after the performance of paracentesis the liver was found to extend down to within an inch of the ilium; the organ was soft, tender, and its margins smooth and even. The spleen was also slightly enlarged. The fluid never accumulated again. The patient was afterwards placed upon a tonic treatment, and when discharged the liver still extended two inches below its normal position.

Several months later (December 6) I saw her again; she seemed in excellent health, and there was no trace left of her former illness, except the notches in her teeth. The liver and spleen promptly returned to their natural size. The urine had never contained albumen in abnormal quantities, but for a short time there was present therein a trace of the coloring matter of the bile.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The value of electricity in various reflex neuroses is illustrated by a number of clinical cases in a communication reprinted from the *Virginia Medical Monthly*, by Dr. J. J. Caldwell, of Baltimore, Md.

——A discussion of Vitiligo, by Dr. R. H. Reed, of Mansfield, Ohio, has been reprinted from the Cincinnati *Lancet and Clinic*. It is a careful summary.

——The annual announcement of the department of the University of Pennsylvania devoted to biology will have a special interest for scientific men. The director is Dr. Joseph Leidy, than whom a more competent master of the subject the world does not offer.

——The announcements of the medical departments of the Jefferson Medical College and University of Pennsylvania for 1885–6 have been issued, and show both those institutions in a flourishing condition.

——Dr. Wm. C. Wile, of Sandy Hook, Conn., has reprinted, with illustrations, a number of surgical cases which will be read with interest by those studying that branch.

——We have received from the Illustrated Medical Journal Co., of Detroit, Michigan, several sets of their Perforated, Adhesive Medical Journal Labels. The list includes besides the journals of the United States that are devoted to Medicine, Pharmacy and Hygiene, those of the Provinces of Canada, as well. Complete sets will be mailed postpaid for fifty cents on addressing the publishers above named. They are just what every physician needs for addressing his Reprints for journal notice, and Medical Colleges for addressing their Announcements for a similar purpose.

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TREATMENT OF DYSENTERY AND SUMMER COMPLAINT.

Dr. Geubin, in Russia, had considerable experience in the treatment of cases of dysentery and of cholera morbus. His results have been so uniformly good that the Medical Society of Kaluga requested him to communicate to them his mode of treatment. The report is published in the *Wratsch*, 12, '84.

Instead of the usual procedure of combining purgatives with opium, G. administers castor oil followed by oleum terebinthinæ, which latter he gives in doses varying from that of ten drops to such of a fluiddrachm. In almost every case thus treated an amelioration of the symptoms almost invariably at once set in, though some cases later suffered from disagreeable secondary effects, viz., affections of the kidneys, due to the large doses of oil of turpentine. In the adoption of G.'s treatment, caution is therefore necessary.

Probably the best treatment thus far known in dysentery consists first in the administration of a large dose of castor oil, then of repeated doses of ipecacuanha and opium—both in rather decided doses—and finally in the injection of large quantities of water containing chloride of sodium and in the, if possible, local application of nitrate of silver. If the ulcer can be seen, the solid stick is the best; if too high up, solutions are better, and these may be made of considerable strength without causing disturbance.

In the summer complaint, as so frequent amongst children in our own country, we generally have found the following treatment to answer best:

The child must receive no nourishment, with the exception of small quantities of rice-water, for the first twenty-four hours. At night, before going to bed, the child is placed in a warm bath, and afterwards wrapped up in blankets. When the perspiration, thus caused, has ceased, the child is carefully dried, dressed in its warmed night-clothing, and put to bed, the linen of which, as well as that of the child, must be changed twice daily, or oftener. In the early morning the child is taken to some sheltered, cool place, either in the country, or if possible in a boat on the

water, or an island in the middle of a large river, or, best of all, kept at the seashore. Internally, small doses of sulphite of sodium (not enough to cause in a healthy child diarrhœa), and of aqua chlorine are administered, and if the little patient has been nourished with its mother's milk the result will always be favorable, while in children artificially fed, the main necessity consists in their being at once removed to the country, or, still better, to the seashore. If such children, who have been brought up by aid of the bottle, are left to remain during the hot season, while suffering from cholera infantum, in the city, our experience has been that most of them will die, notwithstanding the most careful treatment. Many cases do not recover from want of pure air, and of cleanliness, this being the reason of the many deaths amongst the children of the poor.

A DANGEROUS ACCIDENT.

Some time since, Dr. J. C. Biddle, the Surgeon-in-chief of the Pennsylvania State Hospital for Injured Miners, in Ashland, Pa., performed the operation for resection of the head of the femur. The operation had become necessary in consequence of a badly-cured fracture of the surgical neck, which had been of nearly a year's standing and received no correct treatment until the patient came under Dr. Biddle's charge. An immense quantity of pus had accumulated. After Dr. Biddle had laid bare the bone, he took hold of a large syringe containing a solution of corrosive sublimate, and thoroughly cleansed out the cavity. While so doing, he stood in such a position to the patient as to turn his right side to him, while his assistant was looking at the wound more with his left eye. There was a good deal of splashing of pus at the time.

Three days later, Dr. Biddle's *right* eye suddenly commenced to inflame, and about ten hours after his assistant's *left* eye. As usual with physicians, they did not attend to it in the right way, or rather they neglected what in others Dr. Biddle would have at once rigorously treated. Nearly two weeks later purulent ophthalmia was fully developed; granular lids threatened, and the assistant's other eye commenced to inflame. They hesitated no longer, and, what they ought to have done at the beginning, came to Philadelphia and have visited the most experienced specialists. The cases looked exactly like those due to gonorrhœal infection, but Dr. Biddle was positive that he had no case of blennorrhœa in the hospital for over a year. Besides, the history was too clear, the fact of the right eye in the one and the left eye in the other patient suffering also pointed to the real cause, and lastly, the small period of time intervening between the times of outbreak and the equal period of incubation in both.

For almost two weeks the eyes were under the personal charge of one of our most eminent ophthalmologists. Then they had so greatly improved that Dr. Biddle and his assistants are permitted to return home. If we consider how necessary is the presence of the surgeon-in-chief in such a hospital—Dr. Biddle had once to perform about thirty amputations in one week, not counting all the other grave accidents, many of them too late for such an operation—we can imagine how serious was the loss of the use of his eyes for so long a period to Dr. Biddle, not at all to think of the possible dangers of granular inflammations in the eyelids. As very strong solutions of nitrate of silver had to be used in the treatment, the procedure also was a very painful one; the severe ache generally lasting for three hours after each daily application. For yet some time to come both patients will have to visit Philadelphia once a week to consult the specialists.

These cases are besides of great interest from the fact that there is no case on record where a surgeon had met with such an accident from a non-specific purulent discharge, and for this reason alone they are well worth being added to medical literature. Generally in hospitals, where so many operations are performed, specific cases also are abundant, and if the surgeon had to suffer from such inflammation, he was in the position positively to deny the possibility of a specific infection. But the Ashland Hospital admits *only* accidents, and in this case Dr. Biddle was certain that for over a year no patient in the hospital had

been affected with any disease of this kind. That the solution of corrosive sublimate could not have caused the ophthalmia has long been proven.

Notes and Comments.

Oleate of Manganese.

Dr. Franklin H. Martin thus writes in the *Med. Record*, June 27, 1885:

Since manganese first received notice in this country as a menstrual stimulant, and as a remedy in functional amenorrhœa, menorrhagia, and metrorrhagia, it has been a formidable problem to the minds of therapeutists and pharmacists to get it into an acceptable shape for administration. The permanganate of potash, the original peparation used for experiments and administration in any form, is liable to act as an irritant to the stomach, and is very objectionable to many on that account. It has in many ingenious ways been made into pills, but as these pills must of necessity have for their basis kaolin, or some other inorganic substance, the drug is not satisfactorily observed. The compressed tablets of Wyeth & Brother and others, are objectionable in many cases of irritable stomach, because of the irritating and undiluted drug coming in direct contact witb its mucous membrane. The binoxide of manganese has, on account of its insolubility, proved to be almost inert. On account of the many difficulties of administration, therefore, this valuable drug has not met with the warm reception that is its due. Through a suggestion of Dr. S. S. McArthur, I have succeeded in having an oleate of manganese prepared.

Method of Application.—Of a twenty per cent. solution of the oleate, I should recommend that one drachm be applied to the abdomen of the patient, and its absorption promoted by friction produced by vigorous rubbing of the surface with the palm of the hand or with the fingers. The rubbing should be continued until the oil has entirely disappeared by absorption.

In cases where it is found impracticable to apply it to the abdomen on account of tenderness, it may be applied to the spine or the inner surfaces of the thighs.

In cases of amenorrhœa it should be applied, if possible, every night for a week preceding the expected menstrual period, or at the time the menstruation is due, and until it makes its appearance. In cases of menorrhagia or metrorrhagia it can be applied in smaller quantities every night until the desired effect is produced.

I am very anxious to see the profession give this preparation a good trial, because if there is any great value in this drug, it can only become popular as a remedy in some such unobjectionable form.

The oleate was prepared as follows: A solution of sulphate of manganese was made in distilled water, and to it a solution of sodium oleate was added. On mixing these two solutions gradually and with constant stirring, a precipitate of oleate of manganese resulted. This precipitate upon heating changed to a putty-like mass. This was thoroughly washed several times with warm distilled water, to remove the sodium sulphate, and the resulting putty-like mass was the pure oleate of manganese. This oleate, when dissolved in oleic acid to the required per cent., is ready for use.

Direct Inoculation of the Human Being by Tubercle.

Dr. E. A. Tscherning (*Fortsch. d. Medicin.*, 3, 1885,) reports the following almost unique case:

A healthy female cook, æt. 24, served with a gentleman, who soon died of acute tubercular consumption. While staying with him she one day injured herself on the palmar surface of the first phalanx of the right middle finger by a broken piece of his cuspidor entering her finger. The sputum, which was then in the spittoon, was examined by T., and found to be full of tubercle bacilli in almost their pure culture. About a fortnight after the injury the first symptoms of panaritium developed themselves in the finger. Suppuration did not ensue, but instead of it soon after a nodule of the size of a split pea could be felt in the subcutaneous tissue. An incision was made, and lying between the sheath of the sinew and the skin was found the granulating growth, which was destroyed with the sharp spoon. The wound healed within one week.

A few weeks later patient complained of pain on flexing the finger. The parts then appeared swollen, and at the same time the axillary glands were enlarged, but the lungs apparently healthy. These glands now were removed and the finger amputated below the affected part, and the sinew also extirpated. Cured within two weeks; patient discharged. A microscopical examination showed that where the first growth had been removed new granulations had formed. These and the destroyed sinew, as well as the axillary glands, which had been extirpated, were found to contain a considerable number of tubercle-bacilli. They mostly were met with alone, here and there

two and three were found together, and many of them were provided with spores.

Several months later the patient was still in perfect health; the stump was in excellent condition, and, notwithstanding the most thorough physical examination, no disturbance whatever could be detected in the lungs.

The case is decidedly interesting. As far as we know, the pus from a panaritium has never been examined with a view to discover micro-organisms. The co-affection of axillary glands in the case of inflamed fingers is by no means a rare occurrence. We must, therefore, express our doubt, if the direct infection in T.'s case was proven. The girl may have had a common felon, and the latter may be caused by bacilli, *looking* very similar to those of tubercle; for already three such kinds of bacilli exist (glanders, tubercle, and anthrax,) which can only be distinguished from each other by pure culture and study of their different behavior while thus developing. Still, it is possible that a panaritium is always due to tubercle-bacilli of a separate species.

Cocaine in Acute Affections of the Upper Respiratory Passages.

Dr. J. Strahan thus writes in the *Brit. Med. Jour.*, June 13, 1885:

The fact that Jellinek has produced complete anæsthesia of the larynx by the application of cocaine, points to a vast field of usefulness for that drug, not hitherto explored. To secure anæsthesia of the larynx, epiglottis, palate, and pharynx, must prove an invaluable boon to the profession and the patient, in the immediate future. Even the action of carbolic lotion or lozenge in throat affections, as an anæsthetic, is by no means to be despised; so that we can easily imagine the comfort, relief of pain, and even avoidance of danger to life in cases of spasm of the glottis, likely to result from the use of cocaine. It has been used with perfect success in operative procedures about the larynx, but has not yet been tried for either diphtheria or croup. It is obvious what a boon the addition of cocaine applications would be to any plan of treatment. It could be applied either by ordinary swabbing with a four per cent. solution, or by insufflation with the dry powder; or the solution could be sprayed when we wished to reach far down. Even if the applications had to be made as often as every half hour, for a little, the trouble would be as nothing compared with the ease and safety of the patient. In case of necessity, the nurse could apply it perfectly well in any form, if taught. The addition of a couple of drops of chloroform (a solvent of cocaine), to the ounce, would prevent the formation of fungus in the solution, as it does in the case of solutions of atropia, morphia, strychnia, tartarated antimony, and indeed all solutions usually spoiled by fungi. This would conduce to economy, as the solution without any preservative soon spoils, and is then liable to excite acute inflammation in mucous membranes instead of curing it. Of course the chloroform must be dissolved in the alkaloidal solution, by agitation in a bottle not more than three-quarters full. This amount of chloroform causes no irritation, even in the eye, as I constantly use preserved solution of atropia, without causing the slightest pain.

We have now evidence that a four per cent. solution of cocaine painted on the nasal mucous membrane, besides causing anæsthesia, contracts the capillaries, drives out the blood, and causes a membrane swollen and red to become shrunken and pale. In coryza, even where the nares are obstructed by swelling, a strip of lint, soaked in the solution and pushed into the anterior nares, speedily removes the swelling, permits the passage of the breath, and, repeated once or twice, even permanently cures the disease. From these considerations, it seems to me that cocaine is destined to become an indispensable aid in all acute inflammatory diseases, of the upper respiratory passages. In laryngitis, croup, diphtheria, scald of the larynx, simple or reflex spasm of the glottis, and even in chronic laryngeal affections, life often depends on the absence of fits of spasm; and the only remedy, when it occurs often enough or severely enough to threaten life, is tracheotomy. If cocaine, by inducing complete anæsthesia of the parts, prevents these spasms even in part, it will be an invaluable addition to the treatment of these diseases. We have some evidence that it will do so, from the fact that the imperfect means on which we have hitherto had to rely for anæsthetizing the larynx, pharynx, etc.—namely, bromides and chloral—do very markedly diminish the tendency to spasm of the glottis in croup, for instance. For that reason, among others, I am of opinion that a combination of bromide of potassium and hydrate of chloral constitutes the very best treatment for croup—at least, so far as systemic remedies go. The bromide diminishes the number and intensity of the laryngeal spasms. The chloral, in addition, acts as perhaps the most powerful antiphlogistic we have in such cases; it greatly reduces arterial blood-pressure, diminishes body-temperature, and acts as a powerful germi-

cide, both generally and locally. The local use of cocaine, and the constant inhalation of some efficient antiseptic vapor, such as that of eucalyptus-oil, or of turpentine and tar, in addition to the internal treatment described, and with proper attention to alimentation, would seem to me to be an almost perfect therapeutic plan for diphtheria, croup, and many other diseases of the respiratory passages.

Anomalous Coronary Artery of the Heart.

To the Academy of Medicine in Ireland (April 24) Dr. Brooks communicated a case of anomalous coronary artery of the heart, which occurred in a subject in the dissecting-room of Trinity College, towards the close of the winter session, 1884–85. A large branch arose from the right coronary artery, about one-third of an inch from its origin, and passed behind the root of the aorta and pulmonary artery; here it gave off three branches, which ran upwards on the trachea; it then divided into branches which anastomosed in a complex manner with an abnormal branch, which arose from the right anterior sinus of Valsalva of the pulmonary artery. From the anastomosis so formed, two branches ascended in a tortuous manner in front of the bifurcation of the pulmonary artery and the transverse portion of the arch of the aorta, and united into one trunk, which joined an abnormal branch arising from the left subclavian artery near the origin of the vertebral. The three branches mentioned above as ascending on the trachea, after inosculating very freely, gave off a branch to the right bronchus, and then joined a branch arising from the posterior aspect of the arch of the aorta, close to the termination of the transverse portion.

Dr. Purser said that it was difficult to say how the blood flowed in this complicated arterial arrangement. One thing was clear—that, in a case of direct communication between the pulmonary artery and the aorta, the current must be from the latter into the former.

Dr. Heuston thought that the vessel described was a vein conveying the blood back from the junction of the normal and abnormal coronary vessels into the pulmonary artery.

The Production of Phantom Tumor.

The *London Medical Times*, June 13, 1885, says that Dr. Krukenberg, of Bonn, contributes to the *Archiv für Gynäkologie* (Band xxiii., Heft 1,) an article on this subject. In a case of the kind under his own care—a case, that is, of apparent enlargement of the abdomen which disappeared entirely when the patient was anæsthetized—he examined the patient very carefully to find out how the swelling of the abdomen was produced. He came to the conclusion that it was due to lordosis of the vertebral column, this lordosis being dependent upon weakness of the spinal muscles due to anæmia and debility. By the lordosis, he thinks, the space in the abdominal cavity is lessened, hence the pressure within it raised, and the anterior abdominal wall thrust forward by the pressure of its contents. Acting upon this theory of the disease, Dr. Krukenberg treated the patient by keeping her at rest, with pillows, etc., so arranged as to support the pelvis, and thus counteract the lordosis; and under this treatment the abdominal protuberance disappeared. He candidly admits that his theory does not account for the persistence of the apparent tumor in such cases where the patient is lying down, unless hysterical contraction of muscles be assumed; nor, we may add, does he explain why similar phantom tumors are not a regular accompaniment of the lordosis due to progressive muscular atrophy, a condition which suggested to him the theory that weakness of the spinal muscles was the cause of the disease in his case.

An Obscure Popliteal Aneurism Simulating Sarcoma.

The diagnosis of popliteal aneurism is not generally a matter of great difficulty, still some of the cases of aneurism simulate other diseases so closely that mistakes are occasionally made. Many able surgeons have opened aneurisms, supposing them to be abscesses, and others again have tied the femoral artery for malignant growths, mistaking them for aneurisms. There are not a few cases recorded where an old consolidated aneurism has been mistaken for a sarcomatous tumor. In the January issue of *The American Journal of the Medical Sciences*, Dr. Francis J. Shepherd, of Montreal, reports an obscure and instructive case of popliteal aneurism, which was under observation for several weeks, and in which there was a total absence of aneurismal symptoms, and the rational symptoms pointed to sarcoma, either of the periosteum or the parts about an old popliteal aneurism, for which the patient had been successfully treated some years before. Amputation was performed, and an examination of the tumor showed it to be solid throughout and composed of fibrin, solidified *en masse*. The orifice of the aneurism was at the distal end of the tumor, and the blood therefore flowed from below up, with, of course, a lessened

stream; the circulation, owing to the obliteration of the femoral above the tumor, being carried on by collateral branches. As there was no cavity in the tumor, the absence of pulsation and bruit is explained. As there was not a single symptom which pointed to aneurism, an accurate diagnosis seems to have been impossible.

Œdema of the Glottis in Tabes Dorsalis.

Any phenomenon may be met with in the course of tabes dorsalis; at least, this statement would seem to be a warrantable conclusion from known facts. We must not lose sight of the circumstance that accidental phenomena also exist and may occur in tabes dorsalis, as in any other disease, without any special significance. M. Huchard read at a recent meeting of the Société Médicale des Hôpitaux (*La France Médicale*, June 2) a paper on a case of œdema of the glottis, following the administration of iodide of potassium in a patient the subject of tabes dorsalis. There was no history of syphilis or alcoholism, and no evidence of Bright's disease. The man was treated on account of the locomotor ataxy with four grammes of iodide of potassium per day. The treatment had to be suspended owing to the induction of iodism. After some days the medicament was given in smaller doses. This renewed treatment was followed by grave attacks of dyspnœa, which threatened suffocation. M. Gougenheim detected œdema of the arytenoid region by laryngoscopic examination. During one of the attacks the "interne" was obliged to perform tracheotomy. The patient ultimately did well. M. Huchard thought that the grave result was largely due to the influence of the iodide of potassium, whilst admitting that a sensory disturbance in tabes dorsalis may have played a part in the occurrence of the phenomenon. Chemical examination of the iodide of potassium showed that it was impure and contained a certain amount of iodates.

CORRESPONDENCE.

The Alcoholic.

EDS. MED. AND SURG. REPORTER:—

Drunkenness is a disease as well as a sin, and this fact explains the effort which the drunkard usually makes to conceal his habit. A guilty conscience forces him to the expedient of concealment and deception, until his mind becomes so ruined by the action of alcohol that he grows more and more without hope or regard, and finally makes his appearance as the despicable sot. The expression of his face is a distortion of God's image, the burden of his frame is the embodiment of disease, and the sin of his soul is the measure of the eternal curse of God. In his rapid progress towards disease, death, and everlasting condemnation, he has always many chances to reform, and many opportunities to return to rectitude and sobriety; but an effort at self-restraint he will not, as a rule, make; and his habit hurries him down, down, through pain, vice, and sin, to a premature grave. In his progress towards destruction, he becomes the pest of society, and his hand more than all others most frequently dyes the earth with the blood of his fellow-man. He commits *five* of every *six* of the murders of a community. The alcohol which he drinks makes him crazy, and an impetuous feeling of wildness takes possession of his poisoned brain, and causes him to be uneasy, impatient, and restless. If not too drunk to walk he cannot remain long in any one place, and his restlessness heedlessly drives him along, to wander in a manner that renders him unconscious of where he is going. Women and children flee affrighted from his approach, and, like a strange beast in the streets, he will stop and stare with wild eyeballs upon the objects that he meets, and then stagger on in the way the maddened caprice of the moment may drive him. The alcohol inflames his brain to acute insanity; and he will shoot or stab his father, mother, brother, sister, wife, child, or any one, who may give the least cause of irritation to his excited passions. Every community has its supply of such alcoholics, and every legislature has passed laws for their arrest as soon as they make their appearance publicly drunk; but the law is not enforced; and it is but *barbarity* to allow them, thus insane, to go wildly through the streets, without an arrest which would rescue them from the fate that might befall them, or the acts of violence that they might commit.

THE INUTILITY OF ALCOHOL.

If there could be found in the habit of drunkenness power to arrest disease, or force of a medical nature to cure disease when present, then a great demand might arise among a people to encourage the habit by a perpetual legislative license to publicly sell the compounds of alcohol as an indispensable necessity to maintain health; but no such plea can be put forth to sustain the popular use of alcoholic drinks; for of all the causes of disease and death, in a community of mature life, the habit of drinking stands far above any other. Retrospection will confirm this conclusion. Let any one review the adult deaths around him, and he will find, in a large majority of cases, that drunkenness, directly or indirectly, was the prime cause of many an untimely death.

ALCOHOL IS NOT A FOOD.

Alcohol was thought at one time to be a food and was supposed to possess nutritions properties; but this was soon found to be a mistake, and it was justly concluded that a substance capable of producing, when taken into the stomach, such destructive effects on the functions of the organs of the human body could in no manner be regarded as a food, and it is now rightly classed among the poisons. Scientific experience has recognized the fact that under no circumstances,

or combination of circumstances, can alcohol be made a necessity to life; and its thoughtless and indiscriminate use as a prescription or medicine has worked harm in every community.

TRANSMISSION OF ALCOHOLIC DISEASES.

I believe it to be the duty of the physician to discourage the use of alcohol at all times, within and without the medical profession; and the cases are so rare in which it is really needed, and is truly of much actual service, that it could be readily expunged from the list of medicines with great advantage to mankind; and I further believe that the physician cannot too often or too forcibly impress upon the minds of those with whom he may be brought in professional contact the facts in relation to the diseases produced by the habitual use of alcoholic drinks; for as a man and a Christian, no subject connected with the fate of society is more worthy of his serious and solemn consideration.

God will not prosper a people who habitually practice the sins that He has cursed; and this decree is carried out by nature in causing physical vice to descend in line from parent to child. This is the most fearful and lamentable physical evil of the drunkard's life. The morbid degenerations of his body and the deteriorations of his mind, produced by the use of alcohol, are transmitted to those who descend from him, and, as a consequence, the offspring comes into the world afflicted. Therefore, the individual who inflicts upon himself all the mischiefs produced by alcohol, and transmits to his progeny not only his disposition to drink alcohol, but the diseases engendered by it in his own body, is clearly a fit subject for legislative investigation, and every Legislature should make him a more serious matter of deliberation than the passage of the license act that tempts him to get drunk.

It is the result of daily observation that the persistent effects of alcohol on the mind and body of the drunkard are noticeable in his appearance and evident in the weakened mental and bodily nature of his children: for it has been decreed that neither the drunkard nor his offspring can possibly escape the force of the curse which the Bible pronounces against drunkenness.

SANITARY LEGISLATION.

It is but brazen mockery for Congress and the legislatures of the States to pass laws creating Boards of Health to investigate cholera, smallpox, and yellow fever, while such legislative bodies pass laws to license the public sale of the compounds of alcohol, and by such proceedings encourage drunkenness, which kills annually thousands of times more men and women than the three terrible diseases combined, and more than all other causes associated, produces the greatest predisposition or fitness of the human body to take and to die from such diseases; but outraged nature always avenges itself, and drunkenness is ever present and ever by the side of the legislator, with its staggering step, palsied hand, maniacal mind, wild eyes, and puffed and reddened face, to jeer him for his lack of legislative care and discrimination, and to mock by disappointment his efforts, with short sighted plans, to improve the sanitary condition of communities.

It is probably not all superstition to believe that the epidemic diseases which now and then visit mankind with terror and death are visitations of God's providence, for they come when we know not, from where we know not, and go when we know not, to where we know not; but it is the sum of all sensual and vicious promptings for the legislator not to believe that drunkenness, which is of man's invention and perpetuation, is not the most fearful and destructive curse of the community that tolerated it; for were it not for the diseases, poverty and filth, engendered by drunkenness, there could exist but little fear of the spread of epidemic maladies. Then why should legislators blindly stagger, like drunken men, in the passage of laws in reference to the preservation of the health of the people, or physicians anywhere hesitate to declaim against a legislative act, the evil influences of which renders the most arduous portion of their endeavors often unprofitable and nugatory? J. B. JOHNSON, M. D.

Washington City, D. C.

How to Take a Pill.

EDS. MED. AND SURG. REPORTER:—

Not wishing to give a history of the pill, let me say that the pill has been rapidly gaining ground—and deservedly so. In the pill we have the exact dose always at hand, it is cleanly, and we need not trouble with spoons and bottles; it is a preserver of drugs, especially in the easily soluble sugar-coated form. Further, the bad taste and disgust left behind by some medicines, as also the discoloration and bad effect on the teeth are entirely avoided.

The pill takes the medicine where it belongs, to the stomach and intestine. In my opinion, the pill will push to the wall a great many of the liquid forms in which some drugs are dispensed to-day.

A very large class of persons cannot swallow a pill of any description or make; to this class I belonged until last winter, when I had occasion to take chininum sulph., and by a simple method that Dr. E. S. Hanna told me of, I was enabled to take pills as easily as the most confirmed pill-consumer.

Another class of persons succeed in taking pills but by a mighty effort, sometimes hours before taking the dose they begin to make up their minds, as we say, to swallow it without any ado, but as the hour for taking the dose draws near they think of jellies, preserves, prunes, etc., in which to more easily swallow the pill, and even then how often does it end in failure?

The modus operandi of Dr. Hanna's method which I had tried with complete success on many patients, who were taught by their former experience that it was impossible for them to swallow a pill—at least, in the ordinary way—*is to place one or more pills under the tongue.* I repeat, to place one or more pills under the tongue, then take a mouthful of water or other liquid and swallow (just as in the act of drinking); this done, look for the pill. Invariably the "I-can't-take-a-pill-patient" is astonished, and sometimes he investigates the mouth with his fingers to reassure himself if he has really swallowed the pill.

The success—secret—as you wish, lies in the fact that in the act of drinking the tongue curves

back upon itself, the pill, taken by the force of the current, is imperceptibly washed down the œsophagus.

I suggest that the druggists in this as in other countries will have the directions, as above, "how to take a pill," printed on every prescription label intended for pills.

Further, for this country, I would propose these directions be given in German* as well as in the English language.

Further, I suggest that every editor of a newspaper in this, as well as in other countries, under whose notice this may chance to come, will give this simple method, how to take a pill, a space in their paper, and thereby do a large class of readers a real service, which they will receive with grateful recognition. H. ASTHALTER, M. D.

3716 *Butler street, Pittsburgh, Pa.*

NEWS AND MISCELLANY.

Proceedings of the Kentucky State Medical Association.

REPORTED BY ALLEN KELCH, M. D.

(*Continued from page* 55.)

THURSDAY FORENOON.

Dr. M. F. Coomes read a paper on

THE VALUE OF LOCAL AGENTS IN OPHTHALMOLOGY.

He spoke highly of atropia in the treatment of iritis, both as an anæsthetic and a mydriatic, favoring its combination with morphia, especially in phlyctenular inflammation. This solution in the cases of children should, however, be carefully watched; he had known alarming symptoms to manifest themselves after the use of one drop in the eye of a child of an $\frac{1}{8}$ grain solution. Its value is less since the introduction of the hydrobromate of homatropia. Comparison was instituted between the individual agents of the legion that have been used and recommended as local applications. Out of all the number the speaker had derived excellent results from the application of the muriate of ammonia, either in solid stick or saturated solution, to the conjunctiva in cases of sluggish hypertrophied papillæ of long duration.

Dr. L. S. McMurtry, of Danville, read a report of a

CASE OF LIGATURE OF THE SUBCLAVIAN ARTERY,

in the third part of its course, for traumatic axillary aneurism, with subsequent incision of the sac and recovery. The patient was a robust man, aged 30 years, who, thirteen months previously to the operation, received a pistol-wound of the shoulder, the ball passing deep in the vicinity of of the shoulder-joint. In a few weeks a small lump appeared in the axilla, increasing in dimensions until at the time of operation it had reached the size of a child's head. The tumor occupied the entire axillary space, burrowing up beneath the pectoral muscles; paralysis of the arm, forearm, and hand resulted from pressure exerted by it upon the brachial plexus of nerves. The operation was performed two days after the patient called for advice. A silk ligature was thrown around the subclavian at the external border of the anterior scalene muscle. Pulsation at once ceased in the tumor and never returned; the radial pulse, which had been feeble and fluctuating, was annihilated.

The patient made a prompt recovery without complication. On the twenty-first day the ligature came away. One month afterwards the patient returned to his home, and was not seen for four months. Then the tumor had materially decreased in size, without pulsation and tenderness. The paralysis remained. A ligature was now applied to the axillary on the distal side of the tumor to control hemorrhage from collateral circulation; the tumor laid open, the clots removed, and the patient is now making a good recovery and will soon be able to resume his occupation as a farmer.

It is not surprising, said the speaker, when the conditions are considered, that ligature of the subclavian for axillary aneurism is followed by the frightful mortality of forty-eight per cent. Although embodying the principles of the Hunterian operation it is not far removed from the method of Auel. Indeed, when, as in the case reported, the aneurism extends above the acromial thoracic branch, the circulation through the sac is completely arrested by the ligature. Hence, suppuration of the sac from the loose formation of the clot and secondary hemorrhage are to be anticipated. Again, the ligature is placed in the vicinity of large branches. These facts explain the high death-rate. The case is illustrative and the type of a class circumscribed traumatic aneurism. In these cases it approaches in character the pathological form of the disease, with this important exception—the coats of the artery above and below the tumor, are not involved, and are free from disease. It is this feature which makes this class of cases distinct from idiopathic aneurisms, so far as prognosis and treatment are concerned. In eight cases of this class of aneurisms of the axillary resulting from stabs and gunshot wounds treated by ligature of the subclavian cited by Mr. Erichsen, not one fatal result occurred.

In discussing the paper, Dr. W. O. Roberts cited a case in which the subclavian was ligatured by him three times in succession, at intervals of two weeks, on account of secondary hemorrhage, death finally taking place in spite of everything.

A report was next made on

ORTHOPÆDIC SURGERY,

by A. M. Vance, M. D., in which he advocated the resection of joints in cases of infantile paralysis, with the view of producing bony anchylosis in the best position for use and appearance. He accepted the prevailing view of most authorities, that the results following treatment of infantile paralysis occur spontaneously, the treatment instituted simply preventing deformity and assisting locomotion. This he recorded as his experience in the effort to revive the muscles lost. He referred to the unsatisfactory results of apparatus on account of the difficulty of harmonizing the weight of those sufficiently strong with the weakened condition of the patient; yet without their use deformity is certain to occur as the

patient grows older and heavier, and hopeless crippling is inevitable.

In order to accomplish without artificial bracing a degree of support sufficient to prevent deformity, it has been suggested that the residue of the paralyzed muscles have a section removed, thus gaining by an inelastic band better control of the joint below; and in some forms of talipes, calcaneous for example, that the tendo Achillis be resected to gain an inelastic band for support.

A third suggestion, to excise the useless joint, producing bony anchylosis, I have taken the opportunity to put into practice. The hopelessness of these cases otherwise, coupled with the fact that the bone in young subjects readily heals, renders the prognosis far less grave than in the operations performed where bone disease already exists.

Such operations should not, however, be undertaken without the consent of the parent, after a full knowledge of its import and possibilities. Volkmann suggested such operations in 1881. It was not, however, till May, 1882, that your committee found opportunity to put the suggestion into practice. The operation was then performed upon a boy nine years of age, having a history of infantile paralysis since two years of age. The case was one of extreme valgus, in which the apparatus had been used for several years with unsatisfactory results. The bony anchylosis produced secured good locomotion. An incision was made three inches long, widening midway between the internal maleolus and the tendon of the tibialis anticus muscle in the axis of the extended foot, the center of the incision being over the annular ligament. The joint was opened and the foot broken off the tibia, the ends of this bone and the fibula being removed with the ordinary saw. The upper surface of the astragalus was shaved off with a strong bistoury, the bones brought into contact, the wound closed with stitches, and a counter-opening made for rubber drainage tube, no hemorrhage occurring except from the shaved surface of the astragalus; this was controlled by bruising the surface with the handle of the bistoury. Surgical fever reached 102° F. In three weeks the external wounds had healed, though this had been delayed by the excessive secretion of synovia. This boy has now been walking three years, with three-fourths inch shortening of that limb.

In a second case, the knee was excised in a boy aged seven, where paralysis had existed six years. Locomotion entirely by crutches. An incision was made along the inner border of the patella, having the joint for its center. The patella was removed, the ligaments divided, and the ends of the bones easily exposed and sawed off. The external hamstring was left unmolested, it being the only muscle of the thigh which had any vitality left, and which by its contraction had produced luxation and rotation of the tibia. In ten hours after the operation the temperature had risen to 105° F. Reasoning that nothing but malaria developed and rendered active by surgical procedure could produce such a temperature in so short a time, quinine was given liberally and continued for some time with the desired effect. In eight weeks he was out of bed; in three months the wound and counter-opening reopened completely, following the formation of pus. Firm bony union, however, now exists, and the boy can walk quite well. This operation was done in October, 1884.

In another case the ankle-joint was excised in a young woman æt. 25, the subject of talipes equino varus. In this case correction had been completely made by tenotomy and retentive apparatus four years before. In this case there being complete relapse before the operation, there has been a good recovery, the progress of which was interrupted about the third week by diffuse cellulitis of the anterior part of the calf, which yielded readily however to treatment. She can bear her weight upon her foot, but is not yet allowed to walk.

In a fourth case, subcutaneous osteotomy of the femur below the trochanter relieved an angular deformity of the thigh from hip disease, the femur standing at an angle of less than 90° to the pelvis, the deformity being greater because of high dorsal disease preventing lumbar compensation. Patient could stand only with great difficulty, his mode of locomotion being on-all-fours. After the osteotomy was complete, tenotomy was performed upon the muscles going to the anterior superior spinous process. The wounds were dressed with compresses of absorbent cotton, and the case treated as simple fracture, the boy being able to walk at the end of the fourth week.

In a fifth case of deformity, in a boy seventeen years old, the result of knee-joint disease, the joint retained but little motion, the leg being fixed at an angle of 135° and much rotated upon the thigh with marked genu valgum. This was overcome by osteotomy of the lower end of the femur. He now walks with a comparatively comely limb, a compensation of one and a half inches being added to his shoe.

Thursday Afternoon.

Dr. Dudley S. Reynolds read a paper on

Some of the Causes of Failure in Operations for the Correction of Squint.

After the introduction of the subject, said he: "In 1862, Donders gave the first hint at the real causes of convergent and divergent squint. Before that time, central lesions of the nervous system, traumatism, and habit were regarded the most common causes. Graefe was quick to apply the optical principle suggested by Donders. Others took up the subject, and in 1864, when Donders wrote his great work on the anomalies of accommodation and refraction for the New Sydenham Society of London, he presented to the world a clear and well-nigh complete analysis of all the varying forms of squint demonstrating the causes both predisposing and exciting, and showing wherein Dieffenbach's already universally adopted tenotomy had not been attended with that degree of success necessary to establish it as a universally-justifiable operation.

"What Graefe regarded as lost physiological sensibility through psychical exclusion Mooren correctly interpreted as deficient refraction. Strangely enough, however, Mooren did not establish the relations which abnormal refracting power sustains to the accommodative function."

Further on, Dr. Reynolds said:

"To be plain, the world now recognizes in all

the various forms of squint a certain relation to the acuity of vision depending upon irreconcilable obstacles to the harmonious fixing of the two eyes upon a single object. The focusing power and the accommodative power are not the same, yet they are intimately associated with each other, and any disturbance in their normal relations may create the predisposing cause of some form of squint; active accommodation implies the power of harmonious convergence of the optical axes of the two eyes, and a normal power of fixation. The fixing power will depend mainly upon the state of the perception, while the converging power will depend upon the normal state of the recti muscles, and these in turn upon normal nerve and blood supply as well as constitutional vigor. Central nerve lesions may, by disturbing motor branches, create spasm in the muscle or paresis. The pressure of morbid growths may exercise similar power."

As a conclusion, later on, the speaker said:

"I am persuaded that the first step in all cases should be directed toward the correction of errors of refraction; first to the acuity of vision, and subsequently to the inharmonious muscular action."

This done, in a later paragraph the following occurs:

"If the subject have no organic defect other than the insufficient refraction, the squint may be corrected by suspending the patient's accommodation, and correcting the error of refraction. If organic change has occurred, this must be corrected by tenotomy, carefully done, the error of refraction being at the same time overcome by the use of suitable glasses."

The speaker then traced the deleterious effects upon the mental development of children the subject of these deformities, and showed how many cases of that chain of nervous phenomena, now called neurasthenia, are the results of errors of refraction and deficient accommodative power, suggesting, of course, for their relief the correction of these abnormal conditions.

In a brief summary, said he:

"Failures in the attempt to correct squinting are to be attributed to neglect on the part of the surgeon to rectify at the same time deficiencies in the refractive and accommodative powers of the eye; neglect of the patient to observe the rules laid down for this purpose, and more rarely, perhaps, to bungling and unskillful execution of the tenotomy."

The paper was not discussed.

Dr. Wm. Cheatham read a paper on otology, in which he confined himself to a few points in the proper management of acute catarrh of the middle ear. He said the treatment of these affections had recently become simplified and more efficacious. To their bad management many cases of intractable chronic ear suppuration can be traced. Four cases were reported, showing the efficacy of proper treatment, which consists of leeches, hot-water injections, and a dose of calomel and soda, with a chlorate of potassium gargle. At the end of three or four days' inflation, by Gruber's method, is also employed. If there is much pain, opium is also used. Poultices, he said, were injurious in this class of cases, the hot water and leeches being far more beneficial.

This paper, also, was not discussed.

STRYCHNINE AND MERCURIC BICHLORIDE IN THE TREATMENT OF PHTHISIS

was the title of a paper read by Dr. T. D. Fink. After reporting five cases treated in this manner, all of which did well, Dr. Fink spoke as follows:

"Bichloride of mercury in the treatment of tubercular phthisis is in part based on the theory of Koch as to its pathology, a theory that might well be graced with the term fact, for there is none more clearly demonstrated nor so generally accepted as this.

"In treating tubercular phthisis a medicine must be sought that will antagonize its cause, one that will destroy the germ. Must we needs look beyond bichloride, the greatest germicide, the king of antiseptics—an agent that has so won the confidence of its advocates that many, notably Schaede, of Hamburg, since using it regards a compound fracture with but little more concern than a simple one. But should we deny it first rank among germicides, there is still a plea for its use. It has been established that the bacillus flourishes in the strumous subject. Bichloride changes the soil, so to speak, rendering it less favorable to the development and multiplication of the germ. It promotes absorption of the organic element of the tubercle. It hastens the elimination of effete matter, which, remaining in the system, would itself, through diastatic properties, incite rapid oxidation, hence tissue waste.

"Strychnine proves a most valuable congener. On account of its effect on the sympathetic ganglia it arouses the *trophic* nerve, so to speak, to proper performance of function. Under its influence the demand for nutriment on the part of the individual tissues is expressed in an augmented appetite, and the food taken is digested and assimilated, thereby preventing the vomiting. By checking night sweats and colliquative diarrhœa," said he, "we meet two of the most important factors in the case, and two of the most persistent ravishers of the patient's strength.

"Yet while extolling the influence of the bichloride and strychnia, I do not," said he, "forget that other important factors are to be taken into consideration, and that the cough must be allayed, fresh air supplied, and that animal food is a desideratum not to be by any means ignored in the management of these melancholy cases."

Dr. J. P. Thomas, of Pembroke, committee on Pharmacy, had found kairine undoubtedly antipyretic when a dose of 12 to 15 grains was reached, but in sufficient quantities to lower the temperature it had in his hands produced such profound depression of the heart as to require cardiac stimulants; its antipyretic effect proved to be short-lived, also requiring frequent repetitions of the dose. Paraldehyde he classed among the mild soporifics.

(*To be continued.*)

A Dutch Account of Hottentot Pathology.

From a foreign exchange we learn that a Dutch practitioner who has lived for twenty years in South Africa, sends to an Amsterdam medical journal some particulars of native customs and beliefs. The uterus is supposed to have a great

tendency after parturition to fly upwards, and consequently after the second stage of labor the funis is carefully tied to one of the woman's great toes, so as to prevent the placenta from slipping away, and as soon as the third stage is completed she is tightly bound with a cloth or a cord at the level of the umbilicus, for if not the restless uterus would ascend into the breast. After the birth of a stillborn child nothing can prevent the womb from betaking itself into different regions, and then performing unpleasant and painful gyrations. The writer mentions an old native woman who came to him with a scirrhus of the mamma. She complained of occasional pain in the abdomen, but was not seriously concerned about it, for, said she, "I know what that is; it is the womb going round; have I not had a stillborn child? From that time there can be no rest for the womb; he (the womb) keeps springing round and round, not always, but at times, perhaps for three months, and then for a fortnight he is still. Sometimes he sits here (indicating the spleen); sometimes here (touching the right breast); sometimes he sits behind my shoulder-bone, and then he burns like a coal of fire." The uterus has to answer in the native mind for most of the ills to which female flesh is heir; has she a colic, sickness, or any abdominal trouble, it is always the old story—"the womb is going round." When listening to a gesticulating patient describing her malady, and enunciating her diagnosis of the case, it is frequently somewhat difficult for a medical man to keep his countenance. It is utterly useless for him to attempt to reason with the woman or explain to her the absurdity of the position she has taken up. She will only doubt his skill, and scornfully reply, "Doctor must not say it is not so, for I know that it is." Amongst the natives the new-born babe is treated to a purifying draught of the father's freshly-passed urine. The whites, some of whom are nearly as ignorant and superstitious as the natives, employ a quack "wonder-essence" as a substitute.

Items.

—At the recent meeting of the American Climatological Association Dr. William Pepper, of Philadelphia, was elected President.

—Chloral hydrate has been used by Dr. Rodriquez, of Brazil, in gr. 7½–10 to ℥i. of water three times daily as an injection in gonorrhœa.

—In ganglion of a tendon, Dr. Nancrede (Polyclinic) finds the best results for subcutaneous evacuation of the gummy contents of the cyst and then free incision of the sac. The sensitiveness of the skin is first reduced by the rhigolene spray.

—A gentleman made the following return to the Income-tax Commissioners of Calcutta: "For the last three years my income has been somewhat under £150; in future it will be more precarious, as the man is dead of whom I borrowed the money."

—The latest method of applying a mustard poultice is by means of a sponge. The plaster is prepared in the usual way, the sponge is dipped into it, then wrapped in a soft handkerchief, and applied to the part. By simply warming the sponge again and moistening it afresh, it may be re-applied, the strength being perfectly preserved.

—The physician is frequently asked by lady patients for something that will remove "moth" and freckles. A writer in the *Pharm. Zeitung* says that a wash consisting of equal parts of lactic acid and glycerin will do the work, and is harmless when applied to the skin.

—A new idea in quack medicines is threatened, says the London *Globe*. Hitherto one medicine has been put forward as a cure for all maladies; the new idea is to have a separate nostrum for each disease. Instead of a panacea, we are offered a specific. The only precaution is not to take the hydrophobia pill when one merely has the toothache.

—Dr. Hitchcock, President of the State Board of Health of Michigan, claims that 49,000 Americans die each year from the direct and indirect effects of alcohol. He shows the fearful percentage of idiocy, insanity, and criminals from this source, and the money value of health and life sacrificed. The cost of maintenance of the sick, the idiots, insane, etc., the cost of funerals, etc., reaches the enormous sum of $200,000,000 each year.

—Dr. Morse, of San Francisco (*Pacific Med. and Surg. Jour.*, May, 1885), reports a case of ligature of the common carotid artery prior to removal of a growth from the pharynx. Fearing the use of anæsthetics, he injected over the site of ligature three-quarters of a grain of cocaine and a quarter grain of morphia. The artery was ligated, then, beneath the omohyoid, without the patient feeling any pain.

—Apropos of German surgery, an exchange says that some one, imbued with the spirit of the Arabian Nights, has observed that there are men walking about in Germany without viscera, or with but a fractional part of the proper anatomical amount. Metres of their intestine have been resected; their spleens have been removed; one kidney has gone; they have neither pylorus nor gall bladder.

—The *National Druggist*, May 22, 1885, says that the oldest medical work extant is that known as the "Papyrus Ebers," a papyrus roll found in the necropolis of Thebes a few years ago, and which is now known to date back to the sixteenth century B. C., or nearly 3,500 years ago. The manuscript is singularly complete, not a word or letter being missing, and the inks, which are black and red, being as clear and bright as though written only a few months or years ago. It was written by the priest-physician Nebsecht, and treats of the preparation of medicines, etc. Professor Ebers has recently published a complete translation of the manuscript, which is of intense interest to physicians and archæologists.

MARRIAGE.

HARRIS—MARTIN.—March 11, 1885, at "Marengo," the residence of the bride's parents, by Rev. W. A. Boynham, assisted by Rev. A. Broaddus, D. D., Dr. J. T. Harris, of Hedgesville, West Va., and Miss R. Lewis Martin, of Caroline county, Va.